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ABSTRACT

This booklet reports on issues related to an inquiry to examine the effectiveness of Australian schools in preparing young people for the world of work, with special attention to the schools' achievement in providing youth with an adequate mastery of fundamentals. First, the evidence of an educational inadequacy is examined. Inquiry is made into unemployment; the viewpoint of employers, postsecondary education groups, and schools; and 20-25 percent of school leavers who have inadequate levels of literacy and numeracy. Evidence of current difficulties in the teaching professions is then examined under two broad headings: issues related to practicing classroom teachers and their teaching environment and preliminary factors associated with preservice and trainee teacher selection procedures in teacher training institutions. Various initiatives are proposed to improve the general level of teaching proficiency. Finally, a number of initiatives are reviewed that are necessary in order that education and the school structure may evolve to meet requirements of contemporary society. These include a core curriculum, involvement of parents and influence of home environment, greater emphasis on career guidance and student counseling, restructuring the secondary school system, and a practical orientation for educational research. (YLB)

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ED220575

PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

SENATE STANDING COMMITTEE ON EDUCATION AND THE ARTS

INQUIRY INTO THE EFFECTIVENESS OF AUSTRALIAN SCHOOLS IN
PREPARING YOUNG PEOPLE FOR THE WORKFORCE WITH
PARTICULAR EMPHASIS ON LITERACY AND NUMERACY

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Senator M. A. Colston (Queensland)
Senator E. A. Robertson (Northern Territory)
Senator S. M. Ryan (Australian Capital Territory)
Senator B. C. Teague (South Australia)

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(i) Summary

A major part of the inquiry concerned itself with what has come to be regarded in some quarters of society as an apparent mismatch between the education system and the students it produces and community expectations.

Nowhere does this belief seem to be more strongly held than among some employers in commerce and industry. This has given rise to much debate between educators and employers as to what education is for. The Committee is of opinion that employers in industry and commerce tend to see education in strict utilitarian terms and are not fully appreciative of the difficulties and uncertainties that face educators in preparing young people for contemporary society.

We are equally convinced that the schools have become insular in their views on what education is for and are not appreciative of the needs of industry and commerce in a rapidly changing economic environment.

The Committee is of the opinion that these misunderstandings can only be resolved by educators and industry representatives sitting down together and engaging in rational discussion. We believe that this can be most effectively achieved at the grass roots level by discussion between those who represent industry and commerce and the schools who serve the localities they represent.

Another major area of concern that was almost universally shared by witnesses is that about 25 per cent of young Australians who leave Australian schools each year are in some way educationally disadvantaged. These young people were generally described as lacking in the basic skills of literacy and numeracy or what have been referred to as effective skills or life role competencies. There the evidence focused sharply on need to increase the overall proficiency of the primary school teaching profession.

The Committee is of the opinion that in this crucial area, priority must be given to upgrading the teaching skills of teachers already in the profession and to greater care in the selection and training of teachers. The Committee is particularly concerned to see that teachers receive adequate training in teaching methods and in the skills of diagnosing and treating early learning difficulties in primary school children.

Apart from the urgency of upgrading the skills of the primary school teaching profession, the inquiry strongly suggested other institutional improvements to the education system. The most important of these was a call for a restructuring of the secondary school system. The Committee is of the opinion that a re-structuring of years 10, 11 and 12 is urgently required to provide for greater comprehensiveness in education. Such a re-structuring would be a departure from the traditional academic bias that characterises the Australian secondary school system and would aim at giving students the widest possible choice of subjects without any particular bias towards white or blue collar careers.

To facilitate this approach, we are also asking schools to adopt in principle a more flexible and comprehensive curriculum which we believe will not only enhance a student's prospects in a vocational sense but will help young people to relate to and cope with a society that might not always be able to offer immediate career prospects.

Other institutional improvements recommended by the Committee include more manageable class and school sizes, the appointment of specialist remedial teachers, career guidance officers and school counsellors. We are of the opinion that the latter recommendation if implemented will do much to ease school to work transition problems.

In putting forward these proposals, we are aware that their implementation will impose a heavy burden of responsibility on education departments and schools. We would not expect the schools to have to shoulder this burden alone. The Community as a whole and in particular parents and employers in commerce and industry must become more active and effective participants in the school process.

**(ii) LIST OF RECOMMENDATIONS IN THE ORDER IN WHICH THEY
APPEAR IN THE REPORT**

1. Areas of Disagreement and Misunderstanding

(i) That the Commonwealth and State Education Departments initiate debate and discussion within schools and between schools and the community for the purpose of reaching an understanding on the disagreements and misconceptions identified in this chapter.

(ii) That such debate and discussion be conducted at an educational regional level in each State and be established on a regular basis with particular emphasis on consultation between schools and local employers. (Page 9)

2. Teachers

(i) That much greater attention be given by school principals and inspectors of schools (PEO's) in identifying those teachers whose proficiency is inadequate: and that where appropriate such teachers be required to undergo special in-service training to bring them up to standard. Where teacher deficiencies cannot be remedied by in-service training and where teachers refuse to participate in any recommended in-service training: education departments should require such teachers to take early retirement or alternative employment.

(ii) That education departments and independent schools make provision so that where appropriate young married teachers may be employed on a half time basis and/or have one or more years leave without pay. (Page 13)

3. Class Size

That Education Departments and schools arrange staff distributions so that (1) for the first two years of Primary School, class sizes are significantly smaller than for later school years and (2) at all classes in both Primary and Secondary Schools, class size be as small as practicable for the teaching of cognitive skills. (Page 14)

4. School Size

(i) That Schools introduce sub-school units in which children can identify and develop relationships leading to wider variety of contexts for self-expression and self-confidence.

(ii) That Commonwealth and State Education Authorities establish upper limits for school size taking into account recent research in this matter. (Page 14)

5. School Design

That pre-service and in-service education programs include practical courses specifically designed to improve teaching proficiency both in conventional classrooms and in open plan situations in schools. (Page 15)

6. Teacher Training

(i) That all teacher training establishments include a compulsory core of studies in their pre-service training programs. The elements in this core of studies should include—

- (a) teaching techniques in English expression and comprehension and teaching techniques in mathematics;

- (b) techniques in the diagnosis of specific learning difficulties and in methods of remediation;
- (c) an understanding of structure and sequence in the development of curriculum;
- (d) methods of school and classroom organisation and methods of teaching both in conventional classrooms and in open plan situation; and
- (e) The uses and abuses of teaching aids.

(ii) That all teacher training institutions be required to specify the minimum acceptable standards they require trainee teachers to achieve in the teaching of English expression and comprehension and in the teaching of mathematics. (Page 17)

7. Trainee Teacher Selection

(i) That all teacher training institutions adopt minimum entry standards requiring completion of appropriate courses in mathematics and in English to Year 12 level.

(ii) That teacher training institutions introduce programs of in-course assessment of the non-academic and personal qualities of students relevant to teaching such as a sense of responsibility, motivation, resilience, self-discipline and compassion.

Also where the college assessment indicates that a student does not possess the personal qualities relevant to teaching that the student should be required to withdraw from teacher training.

(iii) That students who are not making satisfactory progress in absorbing the methods and techniques of teaching mathematics and English be required to take special courses aimed to bring them up to the required standard.

Students should not be allowed to complete their training unless they have reached satisfactory standards in these basic courses.

(iv) That all schools ensure that students who aspire to the teaching profession are counselled and advised on the minimum entry requirements for teacher training and the continuing assessment in teacher colleges of personal qualities relevant to teaching. (Page 18)

8. Remediation

(i) That teacher training colleges ensure that all trainee teachers complete a course of practical instruction in remediation teaching of mathematics and English and acquire the ability to diagnose specific learning difficulties of children.

(ii) That Education Departments and schools give urgent attention to the training and appointment of suitably qualified remedial specialist teachers to Australian schools.

(iii) That much greater priority should be given to the appointment of these specialist remedial teachers to primary schools, and in particular to the first two years of primary schools.

(iv) That specialist remedial teachers be carefully selected and receive salaries commensurate with their qualifications and experience. (Page 20)

9. School Leadership and Morale

That where it has been established that a School Principal is encountering difficulties in school management provisions be made for that Principal to receive appropriate counselling and guidance. Where this approach is unsuccessful, the Principal should be replaced or transferred to a new role appropriate to his skills or, where appropriate, be encouraged to accept early retirement. (Page 21)

10. In-Service Training

(i) That Commonwealth and State Governments allocate special grants to schools (in client relationship to particular teacher training establishments) to enable in-service training programs on a continuing basis.

(ii) That priority for these in-service training programs be workshops in methods of teaching English and mathematics and in the diagnosis and treatment of learning difficulties.

(iii) That these workshops and courses be available to all teachers who wish to upgrade their teaching skills.

(iv) That teachers identified as in need of this training be required to attend these workshops and courses.

(v) That where appropriate, travelling allowances be paid to those teachers required to attend. (Page 22)

11. Teaching Aids

(i) That teacher training institutions devote part of their training programs to educating and instructing trainee teachers in the use and abuse of teaching aids and in the appropriate selection of aids for different teaching processes.

(ii) That schools exercise some caution in the purchase and use of television as a teaching aid pending the research findings of the Australian Broadcasting Tribunal.

(iii) That schools evaluate their own stock of teaching aids in order to sell ineffective gadgetry and reduce further purchases so that equipment funds may be applied to more effective teaching purposes. (Page 24)

12. Core Curriculum

(i) That a core curriculum in literacy and numeracy, along the lines set out as areas 3 and 7 of the Curriculum Development Centre's Core Curriculum for Australian Schools, be introduced into all Australian schools.

(ii) That such a core curriculum be implemented systematically to achieve continuity of teaching experiences ranging from kindergarten through to year 12.

(iii) That the details of curriculum construction be the responsibility of the respective Commonwealth and State Education Departments and that experimentation with school-based curriculum be restricted.

(iv) That the Australian Council for Educational Research or a similar body, be asked to continue with the national monitoring of literacy and numeracy standards and in particular assess the likely improvement in those schools which implement the objectives of the C.D.C. Core Curriculum proposal. (Page 27)

13. Home Environment

(i) That Education Departments and schools should require headmasters of primary and secondary schools to give priority to establishing closer involvement and understanding between parents and schools, especially by facilitating parent aiding and by involving in school activities the parents of children who are underachieving.

(ii) That Education Departments and schools mount public relations campaigns designed to give maximum effect to recommendation 1. above. (Page 29)

14. Career Guidance and School Counsellors

(i) That Education Departments and schools ensure as a matter of urgency that student counsellors and career guidance officers be appointed to all secondary schools,

having regard to the availability of suitably qualified personnel; and that student counselling and career guidance services be introduced into Australian schools as part of the education program.

(ii) That Government and post-secondary training institutions give urgent consideration to increasing provision for training programs for student counselling and career guidance; and that graduates from such courses be awarded appropriate specialist qualifications and status within the teaching profession. (Page 31)

15. Secondary School System

(i) That the Australian Education Council urgently convene a conference between representatives of Commonwealth and State Education Departments for the purpose of drawing up plans for a restructuring of the secondary school system to provide curriculum structures that directly serve school leavers with non-academic outcomes.

(ii) That in consideration of such a proposal, particular attention be given to the efficacy of having the non-compulsory years 11 and 12 of secondary education conducted in separate senior high schools or colleges. (Page 35)

16. Educational Research

(i) That priorities for educational research be directed towards solving practical problems related to the school, the classroom and teacher training.

(ii) That whenever possible, research findings be translated into statements for policy development and practical propositions so that more effective use can be made of them.

(iii) That Commonwealth and State Governments ensure more effective co-ordination in educational research so that research programs refine and implement current policy requirements and produce recommendations in a form that have practical applications; and so that the process of co-ordination involves not only researchers and policy makers but also in an appropriate and accountable way the classroom teachers, parent organisations and teachers training colleges. (Page 36)

1. INTRODUCTION

The Committee's Terms of Reference

On 31 May 1979 the Senate resolved that the Standing Committee on Education and the Arts inquire into and report upon the following matter:

'The effectiveness of Australian schools in preparing young people for the workforce, with particular emphasis on literacy and numeracy.'

Work of the Committee

Following the referral of this matter to the Committee, advertisements were placed in the national press requesting submissions and information relating to the inquiry. In all 219 submissions and 68 committee documents have been received by the Secretariat.

The Committee opened its program of public hearings in Canberra on 29 October 1979. Subsequent hearings were held in all the mainland capitals and were completed at Canberra on 7 May 1980. In the course of some twelve days of public hearings spread over a period of seven months, the Committee took evidence from 143 witnesses either appearing on their own behalf, or representing some 58 organisations. In the course of taking public hearings at Port Macquarie the Committee undertook an inspection tour of St Joseph's Vocational College. Members of the Committee also undertook an unofficial visit to Copland College in the Australian Capital Territory.

The Committee's Report has been delayed for a number of reasons. On 22 May 1980, the Senate referred the Broadcasting and Television Amendment Bill 1980, insofar as it related to the Independent and Multicultural Broadcasting Corporation, to the Committee for inquiry and report by 19 August 1980. All work on the current inquiry therefore had to be suspended until this task was completed. Work on the inquiry was again interrupted by the 1980 General elections and the Committee was not in a position to resume its deliberations on the evidence until the Parliament reconvened after the 1980-81 Summer recess.

The Inquiry

Generally speaking, the inquiry received a mixed reception. Some witnesses welcomed the opportunity for dialogue with a parliamentary committee, but others made no secret of their reservations about the value of yet another inquiry into education in Australia.

That some witnesses should have held the latter view is understandable. When one is confronted with the bewildering array of reports, papers and evaluations of education in Australia, one can question what another inquiry could usefully add to what has already been stated and re-stated. Over the last few years, we have found that more than 65 reports and papers have been published that range over almost every aspect of Australian education. In addition to the wealth of written material, there have been numerous debates and seminars in all parts of the country.

The Committee could not help but notice an obvious cynicism shared by many that education has become a fashionable topic for debate—a debate that everybody is anxious to enter but from which very little real action seems to result. In particular, the Committee noted that the House of Representatives Select Committee on Specific Learning Difficulties expressed its concern about levels of teaching proficiency in Australian schools in 1976 and recommended appropriate changes in teacher education programs.

The third volume of the Keeves and Bourke Australian Studies in School Performance expressed its concern at the failure of persons in teacher education to respond voluntarily and immediately to challenges such as that issued by the House of Representatives Select Committee on Specific Learning Difficulties. The Committee also noted the concern expressed by research workers that much of the research being conducted into Australian educational problems was not being applied to restructuring schools or even being made available to the public.

We are also of the opinion that in spite of all that has been said and written about Australia's education system, there still remain areas of disagreement and misunderstanding that tend to cloud the more pressing issues. We are concerned that while these conflicts and confusions remain unresolved, they will continue to be given undeserved priority in any debate on education while the more deserving issues remain neglected. As mentioned above, there is already a plethora of papers, reports, and publications that deal in great depth with almost every quantifiable and non-quantifiable aspect of education in Australia. We do not see any useful purpose being served in attempting to summarize all that has been said before or to deal in great depth with any specific issue. Many of the issues raised in this inquiry such as teacher proficiency, the debate about student assessments or the question of what is education for, are all important and of a complex nature.

The purpose of this inquiry has been to examine the effectiveness of Australian schools in preparing young people for the world of work with special attention to what schools are achieving in providing young people with an adequate mastery in the fundamentals of literacy and numeracy. We have, therefore, set ourselves the task of cutting through this thicket of information and focusing attention on what we believe are important issues that have a bearing on these terms of reference. We also intend to identify and comment on the areas of conflict and confusion which we referred to earlier, since it is these areas that tend to cloud the real problems that confront educationalists.

Acknowledgments

The Committee acknowledges and places on record its appreciation of the endeavours of all those who gave their time, knowledge and experience in preparing submissions for the inquiry.

Special thanks is due to all those individuals who appeared personally before the Committee to give public evidence. The Committee assures all those who provided submissions but did not have an opportunity to appear before the Committee that points raised in their submissions have been considered in the writing of this report.

A list of the witnesses who appeared before the Committee at public hearings is contained in Appendix (i) and a list of all persons and organisations who presented written submissions and other information is contained at Appendix (ii).

GORDON S. DAVIDSON, C.B.E.
Chairman

The Senate
Canberra
1981

2. AREAS OF DISAGREEMENT AND MISUNDERSTANDING

Education Inadequacy? The Question of Unemployment

One issue that has received much publicity in the media in recent years is the allegation that problems in education are somehow linked with sharp rises in youth unemployment. It has been stated or implied that school leavers are unemployable because of sub-standard education and that school to work transition problems are also related to high youth unemployment.

The evidence is quite clear that whilst improved education can do much to improve a student's competitive position in the job market, education itself is not to blame for the scarcity of jobs.

The inquiry into Education, Training and Employment concluded that sharp rises in youth unemployment in Australia were not caused by any changes in education philosophy or management. The Inquiry blamed the economic recession and the factors which contribute to its continuance. Research conducted by the Organisation for Economic Co-operation and Development (O.E.C.D.) in other Western economies indicated that the economic downturn being experienced in these countries is a significant underlying cause of youth unemployment.

Nevertheless, the evidence did indicate that many school leavers were finding the school to work transition period a traumatic experience. It is not clear, however, whether this situation is due to educational deficiencies or the difficulties of competing for work in a tight job market.

Because of the obvious difficulties which our school leavers are facing various schemes have been introduced to help ease the school to work transition problems. The most notable of those which came to the Committee's attention is the Education Programme for Unemployed Youth (E.P.U.Y.). Schemes which have a school to work transition content are to be commended and encouraged. However, they should in no way be judged on their ability to create jobs for young people, nor should it be assumed that they have such a capability. It is important to avoid continuing confusion on this important issue and to keep the value of school to work transition schemes in proper perspective. Therefore we need to distinguish between problems of transition and those of unemployment. Both are caused by separate circumstances and both require separate solutions.

While education can do much to relieve the school to work transition problems it can do little about unemployment. Unemployment is a problem that requires political and economic solutions.

Education Inadequacy? The Employers' Viewpoint

A persistent complaint about the education system from employers that has received some prominence in the media recently is that too many school leavers have to be rejected because they have insufficient mastery of literacy and numeracy for basic job requirements. Employers informed the Committee that by basic requirements, all they seek from job applicants are skills such as recording skills and simple mathematical skills in order to execute payroll calculations, time sheet tallying, cross-balancing exercises and the like. Employers claim that schools should take the responsibility for preparing young people to this level of competency.

Another complaint that appeared to have wide support among representatives from industry and commerce was that education has strayed from one of its traditional roles of preparing young people for work. A more extreme view claimed that certain progressive elements in the education system had set out deliberately to undermine positive attitudes to work. This complaint is linked with others from employers about attitudes

and values of school leavers. Their general demeanour, approach to work and their inability or reluctance to discipline themselves to the demands of the work place were the subject of complaint.

The Committee also received evidence from employers which claimed that school leavers often have job expectations far in excess of their ability or their qualifications or, in many cases, what industry has to offer. Other evidence claimed that because of a growing libertarian approach to education there was a danger that both teachers and students were adopting a soft option approach to education by using broad goals as an excuse for not concentrating on the basics.

In its submission to the Committee, the National Industrial Council Confederation of Australian Industry summed up the feelings of its constituent members in the following terms:

'... a significant proportion of young people entering the labour force directly from secondary school:

- (a) lack understanding of the nature and operation of industry;
- (b) have little idea of what they are looking for in the way of employment;
- (c) have little idea of what may be available to them in the way of employment;
- (d) lack an understanding and appreciation of what will be expected of them and their basic responsibilities upon taking up employment;
- (e) possess employment expectations beyond their immediate capabilities and often beyond the capacity of industry to fulfill; and
- (f) possess a low level of basic skills in literacy and numeracy'.

Another matter of considerable concern to employers is the departure from the traditional external examination as a measure of potential work proficiency and its replacement with some form of school based assessment. Employers have complained that such assessments are too vague and general and that there is not sufficient standardisation of reporting methods. The Committee also received evidence that school based assessment procedures and methods tended to vary significantly from school to school. Some employers were giving preference to recruits from those schools which they felt provided the most meaningful assessments. There is evidence to suggest that some schools have recognised the problems inherent in the assessment principle and measures are being taken to solve them.

Education Inadequacy? The View of Post-Secondary Education Groups

The educational requirements for entry to higher education are not always the same as those for the workforce. Nevertheless, institutions of higher education and other post-secondary education institutions are acceptors of school leavers and, as such, have significant comments to make about education standards.

By post-secondary education groups, we mean all institutions which offer some form of post-school education. These include —

- * Universities
- * Colleges of Advanced Education
- * Technical and Further Education Colleges
- * Commonwealth Government Departments such as Defence and Communications
- * Employers who recruit school leavers for apprenticeships

The most significant single complaint from these organisations was the high attrition rates among first year students, particularly those at universities and CAEs. There was almost universal agreement that remedial work was required before many students were able to undertake tertiary studies.

Much of the complaint was similar to that of industry and commerce. Too many students who presented for tertiary training in the physical sciences lacked the necessary basic skills in literacy and numeracy. Many of them were unaware that they required such skills. Colleges of Advanced Education reported similar deficiencies and the Canberra and Goulburn Colleges reported that many trainee teachers were themselves lacking in numeracy skills and were in need of remediation. The Committee noted that a number of submissions received from post-secondary education groups supported their claims with evidence of the failure of school leavers to successfully complete minimum standard entrance examinations in mathematics.

The evidence also showed that there was some conflict of opinion on where the responsibility should lie for advising students that they were unsuitably qualified for higher education. Should this be the responsibility of the secondary schools in the context that they have a task to prepare young people for higher education; or on the other hand is it the responsibility of the tertiary training institutions to set their own entry standards and accept or reject applicants on that basis?

Education Inadequacy? The School Perspective

The argument for a return to an education system geared essentially for the job market was usually accompanied by a call of what is often described as 'back to basics'. Both have been rejected by the schools as an over simplification of a greater and more fundamental need in education today. Few people denied the importance of educating for vocation but almost all educationalists were quick to point out that this was only part of the education spectrum.

As the inquiry progressed it became obvious to the Committee that education was undergoing significant changes and that educators were being profoundly influenced by the major economic and social changes that are taking place around them. Perhaps the biggest single influence on the thinking of educators is that schools see themselves as being asked to shoulder a growing number of social responsibilities in the training of young people that were once those of the family or society itself. These increased responsibilities range from career education, consumer education, sex education to education on drug abuse and the role of the media such as an understanding of television as a mass communications medium. The education system appears to be accepting the new responsibilities as part of its educational commitment.

Educationalists are also influenced by significant structural changes that have taken place in the economy and rapidly advancing new technology that could well result in the disappearance of much of traditional routine work and its replacement with new high technology jobs requiring a whole new approach to education. Most educationalists also accept that even with a return to economic prosperity, it is unlikely that we will see the near full employment conditions experienced in the 50's, 60's and early 70's. Such a dismal prognosis brings into question how much emphasis should be placed on education for vocation. Evidence received from some educationalists suggested that we should be more realistic and honest and be prepared to educate young people for the prospects of being unemployed for lengthy periods and in the creative use of leisure time.

Educators are thus conscious of the fact that the introduction of new technology will result in the displacement of large numbers of routine jobs by the creation of those of a higher technology; therefore we will require growing numbers of school leavers who are innovative, imaginative and adaptable. This means that schools face a greater challenge than ever before in bringing the best out of the available talent we have in this country. The evidence seems to suggest that factors such as these are influencing the thinking of those in the senior administrative positions of Education Departments, and are playing a crucially important role in the framing of educational policies.

The response of schools to the challenge they see in social and economic change is well summarized in the words of the Curriculum Development Centre in its newly released booklet 'Core Curriculum for Australian Schools'. They state:

'There are significant changes and developments in our society to which schools must respond. These changes include:

- increased demands for basic and essential skills, e.g., in communication, human relationships, economic management and working life
- the multi-cultural composition and interests of our population
- our growing regional and broader international roles and interests
- the disturbance effect of rapid scientific and technological change
- increased mobility of families and individuals
- changing patterns of employment and the emergence of structural youth unemployment
- more open, flexible and varied ways of life or lifestyles
- the impact of powerful new and interacting forces in our culture such as television, the leisure industry and 'pop' culture, which affect children's tastes, values and interests.'

A commitment to the 'broad brush' approach to education is the basis of the schools' reply to the critics who claim that education has strayed from its traditional role of educating for vocation.

In this context, the schools have gone to some lengths in distinguishing between schooling and education. The former being explained as the formal process of learning, the latter a process of education in its broadest sense referred to by some as 'education for life'. However, critics of these developments in education express a concern that the 'broad brush' approach has resulted in too much concentration on the 'education for life' aspect at the expense of time spent in teaching the fundamentals in literacy and numeracy. Those who defended the current policies of the education system based their argument mainly on the grounds that their critics in industry and commerce do not fully understand what the schools are trying to achieve.

On more specific issues, schools have argued that it is not their responsibility to prepare young people for specific jobs or careers. While schools accept the responsibility for educating young people in the broad sense, they argue that it is the responsibility of the employer or the post secondary education institution to provide special training courses to bring students up to the standards of competency they require. Schools also claimed that because of a tight job market, employers in industry and commerce were, at times, demanding educational qualifications far in excess of what the job required. It was also contended that some employers' complaints about poor work performance in school leavers could be more closely related to faulty selection procedures rather than to educational qualifications or aptitude.

In this context, there was also evidence to suggest that recruitment officers were not always familiar with what was being taught in schools, nor with the methods of student assessment. Employers were also accused by some witnesses of placing too much emphasis on academic achievement as the sole criterion for assessing a school leaver's work potential and ignoring other personal factors such as punctuality, reliability, motivation.

Schools also questioned the employer's criticisms about attitudes and values in school leavers.

Educationalists have pointed out that a possible confusion in the minds of some employers stems from an expectation that students should be intelligent, thoughtful and creative but at the same time docile, obedient and respectful. It was contended that employers should also accept that young people who emerge from the schools with high expectations and aspirations can become disillusioned and bored with work that is repetitive, unpleasant or sometimes even dangerous.

Education Inadequacy? The 25 per cent lowest achievers

Educationalists were generally not prepared to concede very much to their critics on how schools should be responding to a changing social and economic environment. However, there was a widely shared opinion among many educationalists that unacceptably large numbers of young people were emerging from Australian schools each year who were educationally disadvantaged. These young people were described as lacking in basic literacy and numeracy, or in what some have described as affective skills or life role competencies.

In delivering the 1979 Radford Memorial Lecture entitled 'Youth, Education and Employment' Professor Peter Karmel, Chairman of the Tertiary Education Commission in commenting on basic skills in school leavers stated:

'It is now well recognized that a proportion of young people, perhaps up to one-quarter, are ill served by the operation of our school system in the present social context. Children who emerge from primary school without a capacity to read, number, and communicate are so seriously handicapped in their subsequent secondary schooling that they are unlikely to be anything other than low achievers. Similarly those who leave secondary school with poor cognitive skills and without a capacity to work with others will not compete on an equal basis in a limited job market.'

This statement received a good deal of supportive evidence from State Education Departments and educationalists who appeared on behalf of their organisations or on their own behalf.

Other evidence presented by the Western Australian Institute of Technology drew on the findings of Literacy and Numeracy in Australian Schools, by S.F. Bourke and J.F. Keeves and drew the Committee's attention to the following findings from the A.C.E.R. Newsletter No. 27, June 1976:

'Approximately twenty per cent of the ten year old students and fifteen per cent of fourteen year old students were thought to need remedial instruction in reading.'

'Approximately twenty per cent of ten year old students and fifteen per cent of fourteen year old students were thought to need remedial instruction in numbers. The ten year old students were asked to copy a passage consisting of forty-nine words. Only eighteen per cent were able to complete the transcription without any errors.'

The fact that Australian fourteen year olds performed no better (on more complex addition, subtraction, multiplication and division calculations and problems based on these operations) than thirteen year old students in the United States is, we believe, a matter for some concern'.

This evidence appears to lend some support to the concern about standards that has been expressed by both employers of school leavers and the post-secondary education institutions. Whilst the Committee concedes that much of the complaint by employers was based on opinion surveys rather than empirical evidence, it was not easy to dismiss the persistent and more empirically based complaints from the post-secondary education institutions.

From this evidence we concluded that a satisfactory case had been made to show that at least 20 per cent of young people who leave Australian schools each year are insufficiently trained to compete effectively on a highly competitive job market or to survive the psychological traumas of being unemployed for lengthy periods.

Literacy and Numeracy

Since the terms of reference of the inquiry directed the Committee to look particularly at literacy and numeracy in Australian schools, a significant number of submissions went to considerable detail in addressing this issue. The continuing debate about standards of literacy and numeracy has become important not only because it is

an important educational issue but because it is capable of evoking great public interest and comment.

The most emotive aspect of the debate is whether or not standards are declining. The charges made in the media alleging declining standards are based almost exclusively on complaints by spokesmen from industry and commerce who base their claims about declining standards on their experiences in interviewing school leavers for jobs. An extreme result of this claim is that declining standards of literacy and numeracy in the schools are to blame for rising youth unemployment.

These claims were strongly rebutted by educationalists who pointed to research findings which indicate that there is nothing to support the claim of falling standards. They point to the great deal of research that has been undertaken in this area both at home and abroad. As far as research can be interpreted across countries and across the States of Australia, levels of literacy and numeracy among our contemporary youth are neither better nor worse than in other industrial nations or as between States.

There was also evidence which suggested that because of changed societal expectations which in turn have influenced educational priorities, the size and nature of the student population and the numbers who now stay on at school, we will not be able to determine whether in fact standards have shifted over time.

From this evidence, we could only conclude that any debate on declining standards is largely irrelevant to this inquiry and, apart from academic interest, nothing of any special significance is likely to come from its continuance. We are of the opinion that persisting with this debate is an unfortunate waste of resources and expertise that could be more usefully applied to the immediate and more pressing problems that confront educators today. We were more concerned with an examination of the evidence that related to whether or not today's literacy and numeracy standards in the schools met contemporary society's requirements.

The Committee noted throughout the inquiry that a wide variety of definitions of literacy and numeracy were put forward. Definitions of literacy ranged from the simple approach of an ability to read and write to an ability to communicate in the widest sense of the word. One definition or assessment is contained in the seventh area of learning of the Curriculum Development Centre's 'Core Curriculum for Australian Schools' (See Appendix (iii)). Some witnesses suggested that a competency in literacy was more important than that in numeracy since while one could be literate without being numerate one could not be numerate without being literate.

In attempting to arrive at a meaningful assessment of literacy, the Kees and Bourke 'Australian Studies in School Performance' chose to be guided by the following UNESCO definition:

'A person is literate when he has acquired the essential knowledge and skills which enable him to engage in all those activities in which literacy is required for effective functioning in his group and community, and whose attainments in reading, writing and arithmetic make it possible for him to continue to use these skills towards his own and the community's development and for active participation in the life of his country'.

This definition although covering both literacy and numeracy also suggests that a competency in literacy takes precedence over a competency in numeracy. Although this definition dates back to 1963 and the 'knowledge' and 'skills' in the context of this definition must change with changing community needs and expectations, the definition itself is always likely to hold good.

As we have discussed elsewhere in this report there is ample evidence to support the claim that something like 20 to 25 per cent of school leavers who emerge from Australian schools each year do not have the knowledge and skills as described in the context of this definition. We are therefore more concerned to see our educational resources being used as effectively as possible in reducing this unacceptably high

proportion of educationally disadvantaged young people to the lowest practical level. To this end, we have identified what we believe to be the areas in education in which improvements could be made to achieve this aim.

Conclusions

From this general overview of the evidence, two major considerations emerge.

First, employers see education in strictly utilitarian terms and are highly sceptical of an educational philosophy which is likely, in their view, to erode the traditional work attitudes. Educationalists see their role as being more than training young people for work. In their view education must take account of and reflect changing economic and social conditions in society.

We also gained the distinct impression that employers in general lacked an understanding of what the schools were trying to achieve. We concluded that the employer problem with the school leaver might not be so closely related to literacy and numeracy deficiencies as first suspected but more to attitudinal factors linked to the general demeanour of school leavers and their approach to work. We also concluded that this could explain, at least in part, why employers ask for unnecessarily high qualifications. For instance, an industry survey by the N.S.W. Institute of Public Affairs on the collective views of employers on the quality of young recruits, indicated that employers associate desirable attitudes and values such as reliability, initiative, responsibility, high moral value and self-discipline with high educational attainment.

It therefore would appear that employers ask for high academic qualifications in the belief that associated with these qualifications are the attitudes and values they seek in recruits.

On the other hand schools do not fully appreciate the arguments of employers. There is a tendency for schools to misinterpret the industry call for more emphasis on vocational training. Schools interpret this in its narrowest sense by accusing industry of expecting schools to turn out students who fit into specific occupations. However, our impression was that industry was asking schools to prepare young people with sufficient basic training so as to allow them to adapt to the job in question without excessive remedial education.

Throughout the inquiry the Committee went to some lengths in its examination of witnesses to determine the extent to which employers and educationalists communicated with each other on issues of education policy. Apart from the exceptions of Oakleigh Technical College, St. Joseph's Vocational College and the South East Link Course Authority, the Committee found little or no evidence of regular or systematic communication between industry and mainstream education.

We believe that urgent initiatives are required to resolve the disagreements and misunderstandings we have identified in this chapter of the report.

We therefore Recommend:—

1. That the Commonwealth and State Education Departments initiate debate and discussion within schools and between schools and the community for the purpose of reaching an understanding on the disagreements and misconceptions identified in this chapter.
2. That such debate and discussion be conducted at an educational regional level in each State and be established on a regular basis with particular emphasis on consultation between schools and local employers.

The second major conclusion to emerge from this overview is the general acceptance among educationalists and others that there is little room for complacency in the education system. The evidence was clear that there are immediate and pressing problems in the schools that need to be tackled as soon as possible if we are to make any serious

attempt at reducing the large numbers of educationally disadvantaged children who emerge from Australian schools each year.

In the remainder of this report we will be focusing attention on what we believe are the important issues confronting education in tackling this problem.

3. THE TEACHING PROFESSION

Throughout the inquiry, the Committee was very much aware of the high proportion of written and oral evidence which addressed itself to current difficulties in the teaching profession.

We will examine this evidence under two broad headings. First, those issues which are related to the practising classroom teacher and his teaching environment such as teacher proficiency, class and school size, leadership and morale, and secondly, those preliminary factors associated with pre-service and trainee teacher selection procedures in the teacher training institutions.

The Australian teaching profession abounds with competent teachers, who, by their motivation, dedication and teaching skills, bring credit to their profession. However, the evidence indicated that teaching also has its complement of average and below average performers who, for varying and often complex reasons, lack the motivation and/or skills to be recognised as competent teachers.

As established elsewhere in this report, there is a general consensus among educators that about 20 to 25 per cent of school leavers emerge from Australian schools each year with an inadequate standard of education. There was general agreement that such inadequacies could be attributed to a lack of mastery in the fundamentals of literacy and numeracy and that this deficiency for the most part had its origins in the first years of Primary schooling. It was therefore not surprising to find that, whilst priority attention was directed to restructuring years 11 and 12, the bulk of evidence relating to teacher proficiency focussed on teaching at the Primary school level.

The Primary School Teacher's Inadequate Understanding of Mathematics

The Committee received disturbing evidence taken from the Goulburn College of Advanced Education which indicated that Primary school teacher standards have been declining over the last decade or so. The declining standards were attributed to significant changes in the composition of the Primary school teaching profession.

Over the last decade, there has been a remarkable decline in the proportion of male teachers to the extent that females now represent an ever increasing majority of teachers in Primary schools. In addition, the statistics also show a fall in the average age of teachers over the same period. The Committee was told that in New South Wales, over half the teachers currently employed are under 25 years of age. College tests further reveal that females are underachievers in mathematics. This deficiency stems not from any intellectual weakness in females but from prevailing social expectations that the physical sciences should be the province of males while females would be expected to pursue the arts, crafts and social studies. It was claimed that because of this, whilst females may become very good teachers in their traditional fields, their lack of mathematical understanding leads to inadequate skills for teaching this subject in a meaningful way.

Other teacher training institutions support this evidence. For example, the Armidale College of Advanced Education found that 95 per cent of Primary school teacher trainees failed to achieve satisfactory results in a mathematics test designed to gauge their mathematical ability. The Committee was told that even after a diagnostic and remediation program was put into effect to improve their mathematical skills, 50 per cent of the intake still failed to achieve satisfactory results in most sections of the test.

Further, some witnesses claimed that this weakness in mathematical ability is compounded by these teachers transmitting to their students a negative attitude to mathematics. Because of this negative approach to the teaching of mathematics, particularly in Primary schools, many students avoid taking the subject in the latter years of schooling. Whilst this compounded deficiency in the education system has been recognised by educators over a number of years, very little has been done to remedy it.

The Primary School Teacher's Approach to Teaching Reading

The Committee received only little evidence relating to the literacy skills of teachers. However, there were some suggestions that a significant number of Primary school teachers were deficient in the techniques of teaching reading. As one witness put it to the Committee:

'It is frightening to discover that Method of Teaching Reading is an elective subject in many Primary teaching courses, and the subject is touched on vaguely in 'English Communication'. It is even more frightening to discover that, in some courses, the student may receive no lectures in methods of teaching.'

Other evidence suggested that in some schools when English was not being specifically taught, teachers would neglect reading and writing skills in order, apparently, to favour concentration on the substance of the lesson itself. That is, some teachers do not accept the importance of teaching English skills in every appropriate lesson. This deficiency is even more evident in secondary school teachers who are trained to teach specialist subjects. Thus it appears that currently teacher-training orthodoxy fails to accept for primary schools the principal that every teacher is a teacher of English and every teacher is a teacher of Maths.

The foregoing discussion leads us to some very disturbing conclusions:

(i) That a high proportion of Primary school teachers are young and inexperienced and that in recent years teacher training courses have not sufficiently required proficiency in the techniques of teaching literacy and numeracy.

(ii) That a high proportion of Primary school teachers have not mastered basic concepts in mathematics and have a negative attitude to the teaching of mathematics.

(iii) That teachers who are underachievers in mathematics tend to produce students who are underachievers.

(iv) That while teachers who do not possess the skills in teaching mathematics or reading may be able to identify students who are not achieving in these areas, they do not have the skills to diagnose or remedy the particular difficulties of individual children.

(v) That in spite of their inexperience, these teachers are expected to construct their own curriculum with only the barest of guidelines.

(vi) That the impact of these deficiencies in the teaching profession falls in the primary school area where an early grasp of the fundamentals of literacy and numeracy virtually determine the outcome of a student's educational career.

The Committee's attention was also brought to other factors influencing the proficiency of the practising classroom teacher.

Young Married Teachers

The Committee was told of instances where newly trained young married teachers have to eventually reconcile the responsibilities of bringing up a young family with those of full time teaching. It was also pointed out that in New South Wales, teacher salaries contain a component which compensates for the extra school work teachers are expected to carry out at home.

In the submission presenting this evidence it was claimed that —

'The effectiveness of the input into both tasks is reduced — children on all sides are the losers — the teacher's own and those for whom she accepts responsibility as a teacher.'

In stressing the incompatibility of these tasks, it was suggested that women who applied for accouchment leave should be granted up to five years leave after the birth of their babies.

Older Teachers

In other evidence, the Committee was told that some of the current problems associated with sub-standard teaching and teaching administration stemmed from the teacher trainee intakes of the 50's and 60's.

It was contended in evidence given by the Kelvin Grove College of Advanced Education that—

'Ill prepared and inadequately trained teachers were poured out of the colleges during the 50's and 60's and these people today occupy positions of considerable influence in the cohort of employed teachers.'

Other evidence suggested that because of career promotion limitations and other problems associated with classroom teaching, many highly skilled and experienced teachers were applying for promotions outside the classroom to administrative positions where their teaching skills and expertise were lost. This then compounds the problems mentioned earlier.

The issues we have dealt with so far relate directly to the practising classroom teacher. Whilst we are not able to detail the full extent of these problems in the teaching profession, the weight of evidence leads us to conclude there is an urgent need to initiate active remedies.

We therefore make the following Recommendations:—

1. That much greater attention be given by school principals and inspectors of schools (PEO's) in identifying those teachers whose proficiency is inadequate: and that where appropriate such teachers be required to undergo special in-service training to bring them up to standard. Where teacher deficiencies cannot be remedied by in-service training and where teachers refuse to participate in any recommended in-service training: education departments should require such teachers to take early retirement or alternative employment.
2. That education departments and independent schools make provision so that where appropriate young married teachers may be employed on a half time basis and/or have one or more years leave without pay.

Class Size

Class size as one factor influencing the level of teaching proficiency received a large amount of attention from witnesses.

Most of these witnesses put the familiar argument that under present staffing arrangements, class sizes are in general too large to permit fully efficient teaching. The Committee was told that in Victorian Primary schools, about 40 per cent of classes have more than 30 children. In New South Wales the average class has about 30 pupils.

The Committee is not aware of any significant research findings in Australia that would lead to any firm conclusions on what optimal size classes should be. However, the Committee's attention was drawn to some research in the U.S.A. by Professor Glass which has re-analysed all research on class sizes done in that country since 1940. This research concludes that 20 pupils is the optimal class size.

However, other evidence suggests that no firm figure can be recommended and class size will vary according to the nature of the subject being taught. For example, classes viewing films or taking dancing lessons could be as high as 50 in numbers but for the cognitive skills research shows that class sizes for these subjects should be as small as practicable.

A general debate about class size in secondary schools may become meaningless because students are constantly moving from group to group as they take different core subjects and electives. Thus, students may find themselves in groups varying from about 15 to 35.

The Committee concludes on 3 points to which the evidence leads. First the effectiveness of a teacher should significantly improve as class size is reduced. Secondly, as the first two years of a student's schooling are the most crucial in establishing foundations for basic skills, and as it is in this initial period that learning difficulties will occur, class size should be lower in the first 2 years of primary school. Thirdly, irrespective of the teaching level, cognitive skills are best taught, in the smallest practicable class size.

We Recommend:—

That Education Departments and schools arrange staff distributions so that (1) for the first two years of Primary School, class sizes are significantly smaller than for later school years and (2) at all classes in both Primary and Secondary Schools, class size be as small as practicable for the teaching of cognitive skills.

School Size

In its report on Schooling for 15 and 16 Year-Olds, the Schools Commission noted that most secondary students attend schools with enrolments of from 800 to 1200 students.

However, evidence taken by the Committee indicated that the existence of schools in Australia with student numbers of this order posed a number of important problems relating to teacher proficiency and student-teacher relations. It was suggested by one witness that because large schools tend to reduce the variety of group relationships students are able to engage in, they can have an adverse effect on the learning of literacy and numeracy.

It was contended that, for example, literacy is one aspect of language development that depends on total language development. Language development itself depends on an opportunity to engage in language activities with other people. It was suggested that in large schools which may present a cold and unfriendly environment, this sort of language development is inhibited. As one witness put it —

'Kids think of themselves as a number and that is all.'

Other evidence showed that large schools present administrative difficulties that tend to inhibit an integrated approach to curriculum development throughout the grades. There is also some evidence that suggests that large schools tend to encourage status differences among staff.

In support of these views, the Committee noted the success of smaller establishments like Oakleigh Technical College in establishing closer teacher-pupil relationships and in creating an environment in which the student identified with the school and with his peers and where there were warm and friendly staff relations. We believe there is much to support the argument for smaller schools.

The Committee did not receive very much evidence on what the optimal school size should be. The only study that was brought to the Committee's attention was conducted by Professor Gamble which indicated that around 600 students was a reasonable number for a secondary school.

From the evidence presented to us from small educational establishments such as Oakleigh Technical College and St. Joseph's vocational college at Port Macquarie we are in favour of the small school concept.

We therefore Recommend:—

1. That schools introduce sub-school units in which children can identify and develop relationships leading to wider variety of contexts for self-expression and self-confidence.
2. That Commonwealth and State Education Authorities establish upper limits for school size taking into account recent research in this matter.

School Design

The question of school design did not receive a great deal of attention during the inquiry but some evidence suggested that a poorly designed school could give rise to administrative difficulties and inhibit teaching innovations.

We are inclined to the view that school size is more important than school design. For example, whilst the St. Joseph's Vocational College at Port Macquarie by necessity was constrained by the existing design of building it came to occupy, it enjoys considerable success because of its small size and the motivation and confidence of its teachers and pupils. We believe that much of the problem associated with design would disappear with smaller schools.

Nevertheless, the Committee did note from the evidence a growing popularity for the open plan classroom design. However, the Committee found conflicting evidence on the point of whether the open plan classroom concept had any advantages over conventional classrooms in improving cognitive skills. Yet, one aspect upon which the evidence was unanimous, was that although many Australian educational authorities appear committed to the open plan concept, little is being done to train existing teachers or those entering the profession in the techniques of how to use open plan education to best effect.

While we support innovations in school architecture if they lead to improved education outcomes for Australian children, we see much of this effort being frustrated if teachers are not trained to take advantage of such innovations.

We therefore Recommend:—

That pre-service and in-service education programs include practical courses specifically designed to improve teaching proficiency both in conventional classrooms and in open plan situations in schools.

Teacher Training

Poor teacher training was frequently mentioned in the evidence as the most significant factor contributing to the low standard of teacher proficiency.

In particular the evidence is highly critical of the course content offered to trainee teachers in educational training establishments around Australia. The major complaint is that educational institutions do not offer enough instruction in the practical areas of teaching. There is a lack of training in teaching techniques and in methods of diagnosis and remediation of specific learning difficulties that teachers encounter in the classroom. A related complaint is that because of the priority given to academic subjects, trainee teachers are qualifying without an understanding of how to cater for children's individual differences and consequent needs. Another shortcoming in teacher training is inadequate instruction for designing curriculum. Also there is a lack of training in the best use of open plan education.

Whilst these complaints are serious and persistent; receiving almost universal notice in submissions received they are by no means a recent phenomenon. For many years they have been criticised, but solutions have not been applied. For example, although these deficiencies in teacher training were thoroughly documented in 1976 in the House of Representatives Select Committee report on Specific Learning Difficulties, very little of that Report's recommendations have been followed up. At the time of tabling the report the Committee stated that—

'Teacher training, in the past, has not provided schools with teachers adequately trained for this task. Our report established quite clearly that the basic training of teachers is not specific enough in essential areas such as teaching the basics in reading and maths . . . Moreover, many of the courses offering provide very inadequate instruction for teachers in the skills of diagnosis and identification of learning difficulties.'

In the third volume of *Australian Studies in School Performance* by Bourke and Keeves, concern was expressed that teacher education institutions around Australia have still not acknowledged these deficiencies in their pre-service courses. The concern of those two researchers is best expressed in their own words; words which we now endorse:

'We have observed with growing concern the failure of persons in teacher education institutions to respond voluntarily and immediately to challenges such as that issued by the House of Representatives Select Committee on specific Learning Difficulties to the institutions to change their training procedures. The staff of teacher education institutions would appear to us to have recently found new freedoms and justifiably to prize these freedoms. Moreover, these college lecturers have, for a long period, fought for opportunities to innovate and experiment and with the support of the Schools Commission and the Curriculum Development Centre, have recently received some encouragement to do so. Unfortunately, they would appear to see the recommendations of the House of Representatives Committee for further training for teachers in the recognition of learning disabilities, as well as in improved procedures for teaching the basic skills in the classroom, as part of the back-lash against innovation and experimentation.

The failure on the part of research workers and teacher educators to develop and teach new strategies for the identification of learning difficulties, for the more effective teaching of the basic skills, and for providing remedial assistance to children within the classroom setting, would appear to us to be extremely unfortunate. We do not deny the need for experimentation and innovation. However, we argue that the right of every child to master the basic skills cannot be gainsaid. At the present time we doubt whether some teachers have the necessary skills to undertake effectively the work required of them in this area. Consequently, we argue that the responsibility for change must rest with the teacher educators not only through the provision of courses in special education, but also through the provision of more appropriate pre-service courses as well as in-service courses for those teachers with several years of experience.'

From the evidence we received, there appears currently to be a philosophical conflict between what is meant by teacher training and what is meant by teacher education. Teacher educators are reluctant to accept that teachers can be trained in teaching techniques. Rather, teacher educators emphasise a program of academic study as the essence of teacher training. This approach asserts that teachers learn their teaching skills, if at all, in the classroom or through peer group interaction or through follow-up in-service training.

We did not receive any evidence that satisfactorily explained these policies of teacher educators. Nor were reasons put to us as to why they ignore what many claim are fundamental deficiencies in teacher training. On the contrary the evidence available to us showed that teachers' colleges had failed to clarify their objectives not only within their own organisations but to the teachers and the community at large. The Committee also noted that in cases where teacher training establishments did offer courses in teaching techniques, these were as only part of another course or if separate subjects, as electives only.

In its evidence to the Committee, the New South Wales Teachers' Federation indicated that as teacher training institutions are autonomous, they have the power to allow a wide range of elective subjects into teacher training courses. This flexibility has had the disastrous, even if unintended, effect of allowing teachers to complete a course of training with only a minimal input of what most would regard as the necessary practical aspects of teaching.

In the light of this evidence, and other recent and objective studies on teacher education that have come to our attention, we conclude that there is an urgent need for all teacher training establishments to revise their course programs to ensure the introduction of a core of practical teaching techniques and methods. We believe it is irrefutable that pre-service training should include courses in teaching methods and procedures

and in diagnostic techniques as essential parts of a teacher's training. We therefore conclude that practical teaching methods be mandatory requirements in any teachers pre-service training program.

We Recommend:—

- (i) That all teacher training establishments include a compulsory core of studies in their pre-service training programs. The elements in this core of studies should include—
 - (a) teaching techniques in English expression and comprehension and teaching techniques in mathematics;
 - (b) techniques in the diagnosis of specific learning difficulties and in methods of remediation;
 - (c) an understanding of structure and sequence in the development of curriculum;
 - (d) methods of school and classroom organisation and methods of teaching both in conventional classrooms and in open plan situations and
 - (e) The uses and abuses of teaching aids.
- (ii) That all teacher training institutions be required to specify the minimum acceptable standards they require trainee teachers to achieve in the teaching of English expression and comprehension and in the teaching of mathematics.

Trainee Teacher Selection

The evidence indicated that academic qualifications should not be regarded as the sole criteria in selection procedures and that equal weight should be given to such non-academic, personal qualities as, sense of responsibility, motivation and resilience, self discipline and compassion. Indeed, despite academic qualifications still being the dominant selection criteria in teacher training establishments, the evidence is now clear that high academic qualifications do not always mean that the candidate will ultimately become a successful practising teacher. Nevertheless, the Committee could not find any evidence to show that non-academic qualities were being used to any significant extent as pre-training selection criteria.

The Report of the National Inquiry into Teacher Education (1980) concludes that non-academic qualifications are difficult to assess, particularly in school leavers. The Report agrees that for school leavers these personal qualities are still in the developmental stage and only become identifiable as the student proceeds through his course of training. The Committee noted that some teacher training establishments accept this and are assessing the personal qualities of trainee teachers after their first year of training.

One outcome of this procedure is that some teacher training colleges already have a program of assessing and advising students on their personal qualities and commitment to teaching and where it is considered that a student is not measuring up in this regard, he is given appropriate counselling. Where the college feels that a student has an insufficient sense of responsibility or commitment to teaching, he is advised to leave teacher training.

We strongly support the principle of continuing assessment of those student teacher's personal qualities which are relevant to teaching and we urge all teacher training establishments to adopt such an assessment procedure. We believe it is equally appropriate and necessary for a student teacher if unsatisfactory to be failed on these criteria as on academic criteria.

The Committee also received evidence relating to standards of academic achievement that teacher training colleges should expect before accepting trainee teachers for enrolment. A significant part of the evidence stressed the importance of the teacher

selection procedures adopted by teacher training institutions. This evidence indicates that not enough care is being taken in the procedures used in the selection of trainee teachers and that some training institutions accept lower entry standards in order to fill their quotas.

The Committee received convincing evidence from a number of witnesses claiming that far too many students are entering teacher training colleges deficient in mathematical qualifications. This claim received added support from the Interim Report of the Victorian Enquiry into Teacher Education which showed that 72 per cent of primary trainee teacher enrolments over the last three years had taken no mathematics subjects at the Higher School Certificate level (Year 12). Some witnesses claimed that students who aspire to becoming primary school teachers should have completed courses in mathematics and English to at least Year 12. Other witnesses went as far as to suggest that all primary student teachers have at least one unit of tertiary mathematics included in their training program.

However, the Report of the National Inquiry into Teacher Education, although expressing its concern in this area maintained that students selected by teacher training institutions should come from the top quartile of academic ability and should not be selected on the basis of course content. The Report rather went on to argue that deficiencies in particular subjects such as mathematics should be remedied by the teacher college offering non-credit courses in these subjects.

We believe that if we are really serious in our efforts in achieving the highest possible standards in teaching proficiency it should not be asking too much for teacher training establishments to require their trainees to have completed courses in both English and Mathematics to at least Year 12 level. We also believe that it should be a fundamental responsibility of all teachers and school counsellors to advise school students who aspire to the teaching profession that these initial entry standards are required. These minimum standards should be adopted by all teacher colleges and made available to the public. We also believe that if students are sufficiently motivated and have a sense of responsibility, they will accept the challenge and work to achieve these standards.

At the same time, if teacher training establishments find that those minimum qualifications are insufficient to allow students to grasp the method and procedures of teaching taught at the colleges, then we would support the provision of additional training to bring these students up to standard. We are not so much concerned with arguing where exact responsibility lies for the various levels of educational achievement in the training of teachers but we are concerned to see that teachers emerge from their pre-service training with the highest possible standards not only in academic achievement but in the ability to teach.

In consideration of the evidence available to us on this particular issue, we make the following Recommendations:—

1. That all teacher training institutions adopt minimum entry standards requiring completion of appropriate courses in mathematics and in English to Year 12 level.
2. That teacher training institutions introduce programs of in-course assessment of the non-academic and personal qualities of students relevant to teaching such as a sense of responsibility, motivation, resilience, self discipline and compassion. Also where the college assessment indicates that a student does not possess the personal qualities relevant to teaching that the student should be required to withdraw from teacher training.
3. That students who are not making satisfactory progress in absorbing the methods and techniques of teaching mathematics and English be required to take special courses aimed to bring them up to the required standard.

Students should not be allowed to complete their training unless they have reached satisfactory standards in these basic courses.

4. That all schools ensure that students who aspire to the teaching profession are counselled and advised on the minimum entry requirements for teacher training and the continuing assessment in teacher colleges of personal qualities relevant to teaching.

Remediation

As noted from time to time in this report, it is generally accepted among educationalists that some 20 to 25 per cent of young people who leave Australian schools each year are educationally disadvantaged. This handicap is invariably associated with a lack of understanding in the fundamentals of literacy and numeracy.

All evidence confirmed that the primary cause of this educational wastage had its origins in the very early years of a student's educational experience. Evidence taken from the State College of the Victorian Institute of Early Childhood Development suggested that if we are to forestall patterns of failure, early identification and prevention is necessary. This evidence supported other claims that children who will exhibit difficulties with reading and mathematics can be identified in their first two years of school. Other evidence showed that unless early learning difficulties are identified, these compound as the student is promoted through the primary school years. These students then begin their secondary years of schooling under an educational handicap from which they rarely recover.

Research both in Australia and overseas firmly concludes that unless specific learning difficulties are diagnosed early and unless appropriate remedial action is taken, the success rate of correcting these deficiencies when the student reaches the secondary years of schooling only approximates 1 in 10.

However, these somewhat pessimistic conclusions are not shared by other educators. For example, witnesses from the Oakleigh Technical College argued the case for remediation in the post primary school years and undoubtedly this school and similar establishments have achieved a significant success rate in remediation. Most of this success flows from their creating an educational environment which develops self-confidence and motivation in those students who, in other school contexts, have been underachievers. Remedial courses together with individual courses can be effective in the improved context.

As exemplified by other institutions such as the Link courses at Mt. Gambier, the Vocational College at Port Macquarie concentrating on school years 10 and 11, and the success of the Senior College System in the A.C.T., changes in the physical environment and the status and treatment of students can also help modify attitudes and values which in turn have a significant positive effect on motivation.

There is little doubt that for underachieving students remediation in an Oakleigh Technical School or Port Macquarie Vocational College context is likely to enjoy a higher success rate among students than in the traditional and more academic secondary school system. This is because of the orientation towards employment and adult values, the involvement of practical skills including manual skills, and the fostering of motivation—all of these factors being special features of Oakleigh and at Port Macquarie.

We conclude that there is a high priority need for more remediation in the first two years of primary school when foundation concepts are taught and another focus in years 10 and 11 of secondary schools when for some students self confidence and motivation wanes. However, we believe that remediation should be undertaken at all levels of a student's education career even if the success rate in the post primary school years may be diminished.

While some witnesses claimed that the problem of early learning difficulties could be overcome by employing specialist remedial teachers or additional teachers in a resource or remediation role; others argued that the problem would be best tackled by improving the remedial teaching skills of all teachers especially in the areas of teaching method and in early diagnosis of individual teaching difficulties. Witnesses from the Victorian Department of Education saw the classroom teacher as the focal point of remediation. They too supported the call for greater emphasis on teaching methodology in teacher training courses. We share this view and have recommended accordingly elsewhere in this report.

Nevertheless, we are also of the opinion that while improved teacher training will, to a significant extent reduce the need for employing specialist remedial teachers, there will always be specific and serious learning difficulties in some children which require remediation beyond the capabilities of and time available to the classroom teacher. Accordingly we favour employment of specialist remedial teachers to whom the classroom teacher can refer cases of specific and serious learning difficulty.

We envisage such specialist teachers having proven teaching skills and experience in dealing with the specific learning difficulties of children. We would also regard some additional post graduate qualifications in child psychology and teaching method as an advantage but not necessarily a pre-requisite qualification. Such a specialist should be given appropriate senior status with a salary commensurate with qualifications and experience.

We therefore Recommend:—

1. That teacher training colleges ensure that all trainee teachers complete a course of practical instruction in remediation teaching of mathematics and English and acquire the ability to diagnose specific learning difficulties of children.
2. That Education Departments and schools give urgent attention to the training and appointment of suitably qualified remedial specialist teachers to Australian schools.
3. That much greater priority should be given to the appointment of these specialist remedial teachers to primary schools, and in particular to the first two years of primary schools.
4. That specialist remedial teachers be carefully selected and receive salaries commensurate with their qualifications and experience.

School Leadership and Morale

It is self evident that leadership and morale are crucially important factors which influence the general level of efficiency of any organisation.

Throughout this inquiry, the Committee was aware of a number of factors that could have or were having an important effect on the general level of morale in the teaching profession. These have been dealt with in other parts of the report in the context in which they occur. However, for the sake of convenience we summarise them here as follows:

- a perplexity by many teachers as to what society expects from the teaching profession
- the continuing criticism of the efficiency of the teaching profession made in the media and by influential people
- the cold and inhospitable environment in some of the larger schools where peer and student interaction is inhibited and where status differences are reinforced
- problems of maintaining class discipline which is also undermined by a lack of community support

- pressures on young and inexperienced teachers due to inappropriate courses of pre-service teacher training
- pressures and responsibilities being experienced by the young and inexperienced teachers when required to prepare school curricula
- communication difficulties and discord arising from the administrative and leadership qualities of the School Principal or senior school staff.

As previously mentioned most of these matters have been discussed in the context in which they have appeared in this report. However, we have some comments to make about the role of the School Principal in the context of leadership and morale.

The Committee did not receive a lot of evidence on this issue but where mention was made of the role of the School Principal it was apparent that the administrative and leadership qualities of the Principal and his relationships with the public were essential to the school's growth and reputation. The Committee was interested to note that the Schools Commission in its report 'Schooling For 15 and 16 Year Olds' treated this matter with great concern. On the role of the Principal, the Commission had this to say—

'Above all it has been borne in on Commissioners how important the leadership role of the School Principal is in facilitating the adaptive school. Poor schools are lifted markedly by a good Principal; good schools sag with a poor Principal. The Principal is the focal point of the effort by the school community to create an adaptive school.'

The Commission went on to express its concern that under current circumstances there are virtually no real avenues open in Australian Schools for getting rid of poor Principals. In expressing its concern about this problem, the Commission went as far as to suggest the—

'Creation of new roles at equivalent levels which unsuccessful Principals could be moved into would not be too high a price to pay.'

We support these remarks and agree with the Commission that education authorities around Australia be urged to take positive action to tackle this problem. To this end, we Recommend:—

That where it has been established that a School Principal is encountering difficulties in school management, provisions be made for that Principal to receive appropriate counselling and guidance. Where this approach is unsuccessful, the Principal should be replaced or transferred to a new role appropriate to his skills or, where appropriate, be encouraged to accept early retirement.

In-Service Training

Elsewhere in this report, we have made recommendations for the introduction of in-service programs aimed at improving the level of teaching proficiency currently prevailing for teachers in Australian schools. The evidence suggests however that the concept of in-service training should also be considered in a much wider context.

It is clear that teachers who are going through a course of training now will still be teaching beyond the turn of the century. In the context of rapid social and technological changes there is a need to provide continuing education for the teaching profession even if only to keep pace with educational innovations required to meet society's growing expectations. We therefore believe that there should be two broad programs of in-service training for teachers in Australian schools: one program for teachers who lack proficiency in teaching methods and a second program for continuing innovations in education.

The first program should aim to overcome the immediate problem of bringing those teachers, who require it, up to standard in the methods and techniques of teaching English and Mathematics and in the early diagnosis and treatment of learning difficulties. From both written and oral evidence, we are convinced that there are significant

numbers of teachers in the teaching profession today who are urgently in need of such training. We therefore see this first approach as a priority task.

Moreover such training should not be confined to those who have been identified as strictly in need of it. Rather these in-service training courses should be widely accessible to all teachers.

The Committee was aware during the inquiry of in-service training offering in some educational institutions. For example, the Girrawheen Senior High School in co-operation with the Claremont Teachers' College in Western Australia, runs programs for improving the reading skills of its teachers. Other evidence from the Mathematics Department of the Kelvin Grove College of Advanced Education in Brisbane showed that that College runs workshops in the area of clinical diagnostics and assistance for those teachers who ask for it.

However, the evidence also suggested that in-service training in Australian schools appeared to be conducted on a limited and sporadic basis and relied very much on teachers volunteering for such training. Other evidence showed that administrative and budgetary considerations limited such training. Evidence taken from the Kelvin Grove College of Advanced Education indicated that in-service training is allocated low budgetary priority and that only 1 per cent of the recurrent budget could be devoted to deploying staff to run such courses.

There also appears to be a conflict arising from the attitudes of teachers themselves to in-service training. For example, the Committee was told in evidence at Port Macquarie that teachers take the view that any requirement for teachers to upgrade their teaching skills should be regarded as part of their work and carried out during working hours. This of course could only be achieved by relieving teachers from classroom duties to attend in-service training programs. This is a disruptive approach, breaking the continuity in teaching programs and in teacher pupil relations.

It also appeared from the evidence that in-service training during school hours would be administratively disruptive whether conducted in the schools themselves or at teacher training establishments. For these reasons we see greater merit in conducting workshops and lectures outside school hours particularly during long vacations when the resources of schools and colleges alike are uncommitted. We of course recognise that such a suggestion will be opposed by some teachers but we are confident that the majority of teachers are sufficiently motivated and dedicated to their profession to support the proposal. In suggesting that provision be made for in-service training, we stress that such courses should best be conducted on the workshop concept where teachers are able to get advice and be trained to cope with problems they actually encounter in the classroom.

A second broad program of in-service training should be introduced to allow teachers to be informed and trained in continuing educational innovations. These recurrent courses should be available to all teachers.

We Recommend:—

1. That Commonwealth and State Governments allocate special grants to schools (in client relationship to particular teacher training establishments) to enable in-service training programs on a continuing basis.
2. That priority for these in-service training programs be workshops in methods of teaching English and Mathematics and in the diagnosis and treatment of learning difficulties.
3. That these workshops and courses be available to all teachers who wish to upgrade their teaching skills.
4. That teachers identified as in need of this training be required to attend these workshops and courses.
5. That where appropriate, travelling allowances be paid to those teachers required to attend.

Teaching Aids: Uses and Abuses

The Committee also heard evidence which suggested that various teaching aids, particularly audio visual aids were finding increasing popularity in schools. The Committee was told that these aids were being bought by schools often at considerable expense and in too many instances without a proper appreciation of their real worth in the classroom. As one submission put it:

'Too much expenditure is being directed to educational gadgetry: many commercial enterprises are making fortunes out of the gullibility of the profession. Too many of these 'aids' are to be found, soon after purchase, sitting on shelves, gathering dust.'

The evidence also suggested that aids in the form of imported packaged kits were also being bought by some schools. Many of these are American-oriented and are virtually of little use either from a cultural or educational point of view. Other evidence suggested that while some well prepared lessons by the Australian Broadcasting Commission in mathematics were shown to children, it was usually the case that the classroom teachers gave little or no preparatory work to make the lesson effective nor held any follow-up discussions with students afterwards. We are not suggesting that aids used effectively are not a useful adjunct to teaching. However, we have grave reservations about their worth if schools are not able to determine what aids will be useful or to train teachers in their proper use.

The Committee was also concerned that audio visual teaching techniques such as those using a television receiver, appear to be accepted by schools on the assumption that children learn readily from them. The Committee during its inquiry into children's television, was told of research evidence which cast significant doubts on the effectiveness of television as a teaching medium. This research concluded that television is not effective in teaching but may be entertaining or provide distraction to fill in time. This avenue of research is now being followed up by the Australian Broadcasting Tribunal as part of its forthcoming research program.

The Committee was also urged to consider recommending the introduction of computer based educational techniques as teaching supplements in reading and mathematics. These techniques described as Computer Assisted Instruction or C.A.I., have been developed to provide drill and practice in the basic skills to students in the early years of primary schooling.

Although based on a centralised program, students have access to CAI terminals where they receive intensive and individualised instruction in the very basic skills at levels appropriate to their individual learning capabilities.

It has been claimed that although CAI is only in its early stages of development, considerable success has been claimed for it in the USA. Significant educational gains have been observed after students have spent only some 10-15 minutes daily on the terminal in addition to their normal classroom lessons. Because of this, concern has been expressed that while CAI is demonstrating its usefulness as an educational aid, overseas, the Australian education system has so far failed to recognise its importance. CAI appears to be a teaching aid, worthy of closer attention and to which additional research resources could be allocated to useful effect.

From the foregoing, it is not at all clear as to how effective teaching aids really are. Obviously there is much to learn about what types of aid should be used and the techniques that should be employed to make them effective. It could well be that appropriate teaching aids in the hands of a skilled operator could be useful adjuncts to teaching providing they are always regarded as aids and not permitted to become surrogate teachers.

We are convinced that the real interface between the student and the learning process will always be the teacher. This process is also assisted by peer discussion and activity and most effectively by books and other teacher and student resource enquiries.

We Recommend:—

1. That teacher training institutions devote part of their training program to educating and instructing trainee teachers in the use and abuse of teaching aids and in the appropriate selection of aids for different teaching processes.
2. That schools exercise some caution in the purchase and use of television as a teaching aid pending the research findings of the Australian Broadcasting Tribunal.
3. That schools evaluate their own stock of teaching aids in order to sell ineffective gadgetry and reduce further purchases so that equipment funds may be applied to more effective teaching purposes.

4. SCHOOLS IN NEW PERSPECTIVES

In the previous chapter we advocated various initiatives that we believe will lead to improvements in the general level of teaching proficiency within the framework of the present education system. In this chapter we review a number of initiatives that we believe are necessary in order that education and the school structure may evolve to meet the requirements of contemporary society.

The Disadvantages of School Based Curriculum

Apart from the evidence that was critical of how students were being taught, there were also witnesses who were highly critical of what was being taught in Australian schools. The criticism frequently heard from representatives from industry and commerce was that schools were occupying themselves too much with peripheral matters at the expense of the essential areas of reading, writing and arithmetic. These criticisms were almost always accompanied with a plea for a return to the so called traditional methods of teaching such as drill or rote methods of learning basic mathematical computations.

It was also suggested that the significant shift of the student population from government to non-Government schools in recent years is related to a parent belief that independent schools are more inclined to teach in the traditional manner and are more effective in attaining higher levels in the mastery of literacy and numeracy.

We did not look for or receive evidence on this aspect and so we are unable to substantiate this proposition nor are we able to judge the suggestion that 'progressive' teaching practices in government schools are in any way related to alleged declining standards in literacy and numeracy. However, as stated elsewhere in this report, while schools still regard competency in literacy and numeracy as an important part of a student's educational experience, it is only part of what they consider a student needs.

Contemporary schooling is pursuing a curriculum policy designed to give all students a learning experience that will best equip them to understand and cope with their social and economic environment. Although this broader educational philosophy is gaining ground among leading educationalists, it is by no means an established policy in all schools. Some evidence suggests that schools have been slow to respond to this educational philosophy. Evidence supplied by the Canberra College of Advanced Education indicates that schools in general were still committed to the traditional policies of what should be taught in schools with little signs that they were shifting towards other areas such as personal development or social awareness.

We did not receive any evidence to show the extent to which schools were broadening their curricula or to what extent this was leading to any reduction in emphasis on the teaching of literacy and numeracy. The Committee did, however, receive evidence that was highly critical of the consequences of the shift in recent years from traditional centralised curriculum development to what has become known as school based curriculum development.

This new approach seems to have developed from the general principle of giving schools greater freedom and responsibility in how they organise their schools and how they educate their students. School based curriculum development, within only minimal guidelines from the relevant educational authorities, appears to be based on the belief that the curriculum should serve the student and this can be best achieved when each local school and each local community co-operate. In this way, the school and the community it serves assume responsibility for what students are taught.

In these respects, the approach is seen to make for greater educational flexibility in that individual schools have freedom within general guidelines laid down by the relevant education department to cater for the specific needs of the students in their own locality. If parents have a say with the teachers in what their children will be taught,

then this encourages greater community participation and therefore a better appreciation by the teachers of what society expects of its schools. Although decentralised curriculum development has all the appearances of having a more enlightened and democratic approach to education, the real outcome is often a compromised and confused curriculum. Consequently, this approach has come in for severe criticism in this inquiry.

One of the major criticisms was that school based curricula lacked continuity in teaching which is important in these cognitive areas which can be loosely described as knowledge which leads to the acquisition of further knowledge. In other words, areas of learning such as mathematics represent a continuum of learning and therefore require continuity in the method of teaching and continuity in what is taught ranging from grade to grade through kindergarten to year 12.

Another major criticism raised by the evidence is that school based curriculum development comes unfortunately to rely on the efforts of teachers who have had only minimal teaching experience and no training in this specialist area of education. Many of these teachers have been asked to assume a responsibility that they have not sought and in many cases don't want.

At the same time any school-based curriculum depends significantly on the co-ordination skill and enthusiasm of senior teaching staff and the administrative and leadership qualities of the headmaster. However, these essential pre-requisites are not always present in schools. There was evidence that clearly showed that the removal of the school principal and key staff from a school could have dire consequences for any curriculum in the process of development.

The Committee also noted evidence which suggested that leaving the responsibilities of curriculum construction to relatively untrained staff can have a depressing effect on morale not only through the actual burden of the responsibility but through the absence of leadership from the central administration.

As one witness put it to the Committee:

'Teachers expect, and have a right to expect, from the central administrations of Education Departments, some aspects of purpose, direction and guidance in relation to the curricula areas in which their teaching skills are to be exercised; however, increasingly, in recent years, such direction-pointers have been removed and this withdrawal of responsible teacher guidance and support has been disguised, quite cynically, as the dawning of new teacher 'freedom' and 'autonomy'.'

A third major criticism of school-based curriculum development is the almost total absence in practice of any effective consultation or input from the local community serving a school. For the most part, school-based curricula are designed by teachers themselves and the ideal of involving parents, local industry and community groups remains a myth.

The Committee concluded that while the ideal of school-based curriculum development had some appeal from the viewpoint of freedom and flexibility, nevertheless the disadvantages outweighed its merits. We are of the opinion that the responsibility for curriculum development should be more professional and systematic, and in hands of those who have the expertise in this specialised area of education. We are also of the opinion that this expertise resides in the central administration of the Commonwealth and State Government educational authorities.

We also conclude that curriculum development should ensure continuity of learning experiences both in transition between grades or classes in schools and systematically between all levels of education from kindergarten to year 12.

Towards a Core Curriculum

Throughout the inquiry, the Committee was urged to consider the need for a core of subjects to be taught in all schools and that these subjects should be compulsory learning through the whole of the student's years of schooling. This core of subjects was variously defined as including mathematics, English and sometimes science. In some cases it was simply described as reading, writing and arithmetic or the 3R's. What actually should constitute a core curriculum is a subject wide open to interpretation. Some witnesses saw it simply as a 'set of subjects' which should be taught in all schools across the country. These witnesses often accompanied their arguments with a plea of 'back to basics' and the 'traditional methods' of teaching.

Other evidence suggested that many leading educationalists see this plea if oversimplified as an unworthy distortion of what otherwise is the sound and traditional education concept of teaching mastery of the essential means to learning. Evidence also showed that where there has been a distorted return to rote teaching practices and drill methods, no appreciable gains have been made in reducing illiteracy and innumeracy. It is a myth that rote learning was ever the best method towards mastery of basic learning.

The Curriculum Development Centre in its booklet 'Core Curriculum for Australian Schools' (February, 1981) calls for a redefinition of core curriculum in the following terms:

'A redefinition of core curriculum is needed because our traditional way of packaging knowledge into required subjects no longer satisfies either society or students.'

The Centre has proposed a core curriculum based on nine areas of knowledge and experience. These are reproduced in fuller form at appendix (iii).

The areas of literacy and numeracy which are of particular interest to this inquiry are covered by areas 7 and 3 respectively.

Area 7 which is entitled simply 'Communication' is a detailed analysis of many aspects of communication skills including listening, speaking, reading and writing. This area also includes aural learning including an understanding and appraisal of the mass media.

Area 3 is entitled 'Mathematical skills and Reasoning and their Application'. This area prescribes a core of learning which covers the use of mathematics and mathematical skills in their widest sense including, for example, relevance to everyday life through the use of computers and calculators.

The CDC core curriculum proposal was published after all the public hearings of this inquiry had been completed and so we did not receive any direct evidence evaluating this particular format. However, we would suggest that such a curriculum could well be introduced in Australian schools coupled with an appropriate teacher training program both pre and in-service to ensure the teaching profession is well able to use such a program with maximum effectiveness. The success or otherwise of such a program in reducing the number of educationally disadvantaged who emerge from the schools each year could only be determined through practical application and periodic assessments on a national scale.

Accordingly we Recommend:—

1. That a core curriculum in literacy and numeracy, along the lines set out as areas 3 and 7 of the Curriculum Development Centres Core Curriculum for Australian Schools, be introduced into all Australian schools.
2. That such a core curriculum be implemented systematically to achieve continuity of teaching experiences ranging from kindergarten through to year 12.
3. That the details of curriculum construction be the responsibility of the respective Commonwealth and State Education Departments and that experimentation with school-based curriculum be restricted.

4. That the Australian Council for Educational Research or a similar body, be asked to continue with the national monitoring of literacy and numeracy standards and in particular assess the likely improvement in those schools which implement the objectives of the C.D.C. Core Curriculum proposal.

Home Environment and Parental Expectations

A crucial factor in a child's educational development and achievement is the home environment and is recognised by researchers as an even more significant variable than the school in determining a student's scholastic achievement. The Committee was told that repeated research over the last 20 years in the U.S.A. and Australia has indicated without exception that the major influence in educational achievement is the home background and parental expectation rather than the type of school attended, the proficiency of the teacher or the curriculum followed. The evidence shows that motivation, aspirations and expectations in a child are moulded by the family from the moment the child is born. The role of the parents in early childhood or pre-school education is therefore of crucial importance.

The process of early learning is facilitated by parents talking to their children, reading to them and doing things with them that both parents and children enjoy. The Committee was told that when parents do take this kind of interest in their children and then later advise them about careers, the resulting learning skill and motivation of the children justifies the efforts the parents have made.

Unfortunately, however, the evidence from this inquiry strongly suggests that large numbers of Australian children begin their formal educational experience without the benefit of this initial contact with their parents and in a sense begin their schooling experience culturally deprived. This initial handicap is compounded when parents adopt the attitude that once their children have entered school, the responsibility for education becomes the sole responsibility of the teacher and the school. There is ample evidence to support the claim that much of the early reading difficulties experienced by children in their early school years have their origins in such cultural deprivation.

The Committee was told of a number of factors that have a bearing on the home environment and the attitude of parents. There is much evidence to support the claim that underachieving children tend to come from homes in the lower socio-economic groups in society. They are often the children of low-income families where both parents work or in many cases the children of single mothers. Because of social, economic or domestic pressures, these parents do not have the time or motivation to read to or communicate with their children.

Other evidence suggests that this problem arising from the home background is perpetuated in cases where the parents of underachieving children were themselves underachievers at school and who themselves came from homes where there was little family interaction and where few books were available to encourage reading.

Another factor which was only referred to from time to time but which in fact has had a profound influence on environment is the television receiver. One of the most startling revelations from the Committee's inquiry into the impact of television on the development and learning behaviour of children in 1978 was that 20 per cent of Australian children spend more time in front of the television receiver than they do in the classroom. These research findings also estimated that this 20 per cent of children is viewing television in excess of 30 hours a week and sometimes as high as even 80 hours a week. The evidence from that inquiry also showed that children who are heavy viewers of television also tend to come from families in the lower socio-economic groups in society. It was even more significant that low achievement at school was strongly correlated with heavy television viewing. There was also evidence which suggested that television viewing was a significant factor in the gradual decline of family communication and social interactions.

The foregoing factors together with other social and economic pressures which have become a feature of modern western societies appear to be leading to a breakdown in the traditional influences of the family unit and to a general decline in discipline, order and established relationships in our society. At one time the responsibility for inculcating values and attitudes and qualities of self-discipline in children rested with the parents. Parents now appear to be abrogating these responsibilities and thrusting them on to the schools. As a result of changed societal attitudes and expectations, more is being expected of the schools. Almost every school problem including sex education, road safety and drug abuse, have come to be regarded as appropriate topics about which children should learn something in the schools. Not only is this trend in community expectations leading to an over burdening of the school curriculum, there is also evidence that it is having a profound effect on the whole approach of the teaching profession to education.

We believe that the emphasis on education in the broadest sense by schools has resulted from these pressures and explains, at least in part, why teachers are not devoting as much time as they should to literacy and numeracy particularly in the context of underachieving students. Although large numbers of Australian homes fail to provide an environment for their children conducive to learning and are prepared to send them to school without home training in the fundamentals of motivation and self-discipline, they tend to have extraordinarily high expectations of what the schools will do for their children. Moreover, there is evidence that when problems arise parents are not necessarily on the side of the teacher. In too many cases, parents of disruptive children adopt an over protective attitude with their children which compounds the difficulty of trying to maintain classroom discipline.

In his appraisal of parent-school relations, the journalist Max Harris wrote in the following trenchant terms:

'We live in an age of idiot parenthood. It is the age of my-children-right-or-wrong. The parents not only fail to endorse and back-up the disciplines required to acquire minimal skills from the educational process. They support the unruliness, resistance, and psychological libertarianism of their kids, and yet they expect the educational system to produce the skills, while at the same time transmitting white collar employment expectations to their offspring.'

Clearly there is a great and urgent need to get parents into the schools and with the help of the schools, to get parents to understand what the schools are trying to do. There is a need for parents to see the general nature and objectives of a school's activities: there is also a need for particular insights and assistance. The Committee was impressed with the efforts being made by some schools to encourage parents to help in the classroom by giving more individual attention to slow readers.

In one school, the Committee was told, 21 parents were helping in a remedial program for year 8 students. Similar evidence showed that in Queensland parent aiding was facilitating and encouraging an educational environment in the home. Parent aiding has also enjoyed some success in helping to bridge the gap in parental understanding of what children are being taught now and what parents were taught in their day. We believe it should be obligatory for all headmasters of Australian schools to foster this sort of parent-school co-operation. Special care should be taken to involve those parents whose children have learning difficulties or who are for other reasons underachieving. Teachers should also have little hesitation in telling parents in frank terms of their children's failings.

We Recommend:—

1. That Education Departments and schools should require headmasters of primary and secondary schools to give priority to establishing closer involvement and

understanding between parents and schools, especially by facilitating parent aiding and by involving in school activities the parents of children who are underachieving.

2. That Education Departments and schools mount public relations campaigns designed to give maximum effect to recommendation 1 above.

Career Guidance Officers and School Counsellors

Throughout the inquiry, there were many suggestions made to the Committee about the need for greater emphasis on career guidance and student counselling facilities in Australian schools. It was contended that, in an increasingly tight and highly competitive job market, it was becoming more important than ever to provide school leavers with as much counselling and guidance as practicable so as to close as far as possible the gap between education and the workplace.

The need for such education takes on an even greater significance for the early school leaver who seeks a job where competition is at its greatest and who does not always have very much to offer the employer in terms of either educational qualifications or experience. In the context of preparing young school leavers for careers in the broader sense, the Committee received evidence that Australian schools have no formal career education program. In fact the Committee was told that the majority of schools did not have full-time career advisers or teachers.

Other evidence indicated that where specially trained career guidance officers were available their services tended to be spread over a region of up to five high schools depending upon the size of the schools. The Committee was also told of instances where budgetary and other considerations were actually leading to a scaling down of career guidance and counselling services in some schools. In some other instances counselling and career guidance services were being provided on a part-time basis by regular teachers who were periodically relieved from teaching to provide the service. From this evidence, the Committee concluded that while there was good reason to believe that career guidance and student counselling were of real importance in the education program, it was the most neglected area of secondary education in Australia.

Apart from difficulties arising from budgetary constraints, a more basic disability than coming to grips with the potential of a career guidance program appears to be the confusion as to what counselling and career guidance really entails, how the service should be undertaken and the qualifications and experience required. Suggestions for improving career guidance and counselling facilities in schools ranged through the employment of additional teachers who had industrial and commercial experience, seconding people from industry and commerce, recruiting people from industry and commerce into the teaching profession or making provision for teachers to have leave to obtain work experience.

Other evidence however, suggested that a distinction should be drawn between the functions of career guidance and student counselling. These witnesses saw a student counsellor as a trained specialist capable not only of giving guidance on education and career matters but also and more essentially of administering pastoral care by being specially qualified to counsel students in such matters as personal awareness and development, health and welfare. This evidence also saw both of these tasks as being separate and specialised functions in the teaching profession requiring skills and training beyond that of the normal classroom teacher.

The Committee noted that the specialist role of career guidance and student counselling is already being recognised. In Victoria for example, the Royal Melbourne Institute of Technology and the Rusden State College, both offer courses in career guidance counselling. The Committee also notes that all States offer courses in student counselling. However, in spite of a growing awareness among educationalists of the need for

such specialised education, one major impediment to the development of career guidance and student counselling is that at present there is no career structure offering promotion prospects within the teaching profession for those appointed to such positions. We do not see this lack as an insuperable barrier but believe that such positions within the education system could be made more attractive by offering appropriate status and salaries commensurate with qualifications. We also believe that there are other avenues of advancement open to people possessing qualifications and experience in the field of career guidance and student counselling. Such people could find rewarding careers in personnel management in industry or by taking up lectureship posts where their knowledge and experience could be imparted to others.

However, it is also conceivable and perhaps more forward-looking to propose that a career structure could be created within this specialised field of teaching that would allow scope for promotion within secondary schools. There might also be scope for broadening the career base by linking student counselling and career guidance with other closely related specialised educational activities such as remediation, course selection, testing, diagnosis and other matters which are best handled by specially trained professional persons.

In consideration of the evidence taken in this area of the inquiry, we are of the opinion that student counselling and career guidance form a vital part of the school education program and that urgent steps should be taken to ensure that these services are available in Australian schools.

We support the contention that the introduction of efficient student counselling and career guidance would do much to ease the problems of transition from school to the workplace.

We Recommend:—

1. That Education Departments and Schools ensure as a matter of urgency that student counsellors/career guidance officers be appointed to all secondary schools, having regard to the availability of suitably qualified personnel; and that student counselling and careers guidance services be introduced into Australian schools as part of the education program.
2. That Government and post-secondary training institutions give urgent consideration to increasing provision for training programs for student counselling and career guidance; and that graduates from such courses be awarded appropriate specialist qualifications and status within the teaching profession.

School-Based Student Assessment

During the inquiry, the Committee received a great deal of evidence which pointed to the pitfalls in relying too much on the norm referenced 'paper and pencil test' as a meaningful assessment of a student's ability in achieving mastery in literacy and numeracy.

It was argued that 'paper and pencil' tests do not provide a true indication of a student's ability or potential. For example, providing the right answer to a question is not necessarily an indication that the student has fully understood what the question is about. Similarly an incorrect answer to a question in numeracy might arise from one of a number of reasons apart from a lack of mechanical mathematical knowledge. Failure to provide the correct answer could have its origins, for example, in some specific learning difficulty, the symptoms of which are not obvious from 'paper and pencil' tests.

It was also contended that 'paper and pencil' tests tend to have limiting effects on the curriculum in the sense that such tests set minimum standards which eventually become goals. Teaching therefore, tends to focus itself on the mechanics of passing tests rather than on imparting a full understanding of the subject to the student. This kind of evidence also alleged that the re-introduction of the external examination has also been

opposed on the grounds that classifying students into pass and fail categories does not reveal their strengths or weaknesses or provide any guide as to how weaknesses could be remedied.

Other evidence shows, however, that in spite of this kind of disfavour and the general shift away from the traditional norm-referenced test as a yardstick of student assessment, there has not been a total abandonment of this form of in-school assessment. Although schools are free to conduct any form of student assessment they see fit, the evidence indicates that norm referenced testing continues to be the most widely used form of internal assessment.

Other evidence showed, however, that some schools are adopting criterion referenced tests which give an indication of the level of student proficiency in literacy and numeracy by reference to their ability to complete certain tasks. These tasks relate to real life activities and are selected on the basis of expectation that the student should be able to complete them competently if he has attained a satisfactory mastery of literacy and numeracy at that particular stage of his educational career. Educationalists who support the criterion based assessment test claim superiority over the traditional norm referenced test in that the former has greater potential for identifying areas of underachievement and in suggesting appropriate programs for remediation.

From our assessment of the evidence presented to us on school assessment, we conclude that the criterion based assessment test has potential for further experimentation and development. However, we stress that the degree of success of such techniques aimed at more accurate and meaningful assessment within the final analysis, depend on how efficiently teachers are trained in implementing them and interpreting the results.

National Assessment of Schools

While industry representatives and other acceptors of school leavers are generally in favour of some form of monitoring of school standards, the teaching profession expressed mixed feelings about any form of national assessment. In fact there has been among some teachers open hostility to the introduction of the National Monitoring of Literacy and Numeracy under the auspices of the Australian Education Council. It appears that the introduction of any form of continuing assessment of education standards is seen by the teaching profession as a thinly disguised attempt on the part of the bureaucracy to hold teachers accountable for their teaching proficiency.

Our belief is that if we are to have a nationally accepted education program aimed at achieving the highest possible levels of literacy and numeracy, then we should have an appropriate and objective form of ongoing assessment to determine the effectiveness of such a program. We are of the opinion that a national monitoring of standards based on criterion referenced assessments, and administered impartially will be of great assistance to the teaching profession in the longer term. As deficiencies in the education program are detected these can be remedied and the results fed back to the teachers. In this manner teaching techniques and the education program itself can be continually refined.

We therefore support the implementation of the National Monitoring of Literacy and Numeracy and recommend its continuance.

A Case for Restructuring the Secondary School System

A criticism of the education system that came through persistently during the inquiry was that secondary schools lack comprehensiveness in the sense that their curricula too narrowly favours those students who are academically minded and who aspire to enrol in post-secondary education programs. The charge has been made that secondary

schools are geared to cater for an elite minority, a minority which has been expanding over the years but still remains nevertheless, a minority. To understand the basis of this bias and the nature of the problems faced by secondary schools, one needs to consider the dramatic change in retention rates that has occurred over the last two decades. Less than 20 years ago, about one student in ten who started high school went through to year twelve. That proportion has now increased to about one in three. These higher retention rates have created major problems for secondary school planners.

The original concept of the Year 12 curriculum was to serve that very small minority of students going onto post-secondary studies. However, in successive years, the number of students failing this year of study has grown to be far in excess of those going on to tertiary studies. In the meantime, the original curriculum has persisted. Indeed many argue that the academic bias of Year 12 has expanded to a like bias in Years 10 and 11, thus the burgeoning numbers of students enrolling in the final years of secondary schools have far outstripped the development of more appropriate curriculum and school studies to best serve them.

As a result it has been estimated that about one-third of all secondary school students, for varying reasons, are disillusioned and dissatisfied with their secondary school education. This dissatisfaction has given rise to negative learning attitudes in students as well as problems for schools in the maintenance of good discipline. An additional problem requiring a restructured curriculum is that 15-20 per cent of students leave school prior to year 10. These early school leavers usually come from the lower socio-economic groups in society. They are usually low achievers who lack basic skills and who have virtually nothing to offer an employer. Their hopes of finding employment on the present highly competitive job market are minimal. Thus for each of the school years 9, 10, 11 and 12 the education program fails in many cases to retain the interest of a significant proportion of students. This is a major reason why large numbers drop out at year 11 or fail to complete year 12.

Elsewhere in this report, we have also discussed the handicap imposed on students through poor primary schooling as a factor contributing significantly to the destruction of motivation and subsequent drop-out on the part of so many students.

A third and equally important factor contributing to the general disillusionment shared by so many students is the insistence by parents that their children should proceed to advanced secondary education and hopefully beyond irrespective of the student's own aspirations or academic ability. There is also the mistaken belief that the longer a child stays at school the better his or her chances will be of securing white-collar employment or apprenticeship status in a skilled trade. Other evidence indicates that there has been a growing societal attitude that academic qualifications are the only credentials recognised and respected by employers and that anything less than academic achievement or white-collar employment is an admission of failure.

The Committee notes however that although secondary school curricula still tend to be very much academically oriented, there have been a number of significant changes in parts of the education system which offer alternative avenues of education to those less academically minded. These alternative courses have been designed largely to fill the educational gap left by those secondary schools which fail to provide a curriculum that more comprehensively would seek to meet the needs and aspirations of all students.

The Committee was given several examples of institutions which offer these alternative courses. The schooling offered by Oakleigh Technical College in Melbourne was described to the Committee as a 'component of a student's total education'. The College aims to develop academic ability, vocational ability and competencies in extra-curricula areas in order to prepare students for adult entry into society. On the vocational side, the College emphasises its function to train young people for specific vocations and has enjoyed considerable success in placing its students in jobs.

Another and similar example is St. Joseph's Vocational College at Port Macquarie where courses are provided to up-grade standards of literacy and numeracy and to train young people to take advantage of the job vacancies existing in the area the College serves.

The Committee also heard evidence from the Lower South East Link Course Authority in South Australia which administers courses which link secondary students to employment. These courses are conducted at the South East Community College for the secondary schools of the Lower South East Region of South Australia. The objectives of the Link Course program are basically to introduce secondary school students to work experience and to demonstrate to them the relevance of school work to practical application in the work place. The Committee also understands that nearly two thirds of Western Australian Senior High Schools offer less academic alternative courses to their senior students. The Committee also noted the growth and success of the Senior High School or College concept in the A.C.T. and in Tasmania.

In acknowledging the part these institutions and others like them around Australia play in meeting a neglected area of education in Australia, the Schools Commission in its report 'Schooling for 15 and 16 Year-Olds' issued a cautionary note of warning that unless these institutions are accepted and their credentials valued by the Community at large they are unlikely to enjoy a full measure of success. The Commission was anxious to point out that such institutions should not come to be regarded as 'catch-alls' for those who have failed to establish themselves in the 'mainstream' of education. From the evidence we received, there was every indication that the policies of these alternative educational institutions were being more than favourably received both by local employers and the associated community at large. Although the growth of these alternative education systems might be viewed as symptomatic of a failure on the part of the traditional secondary school system to provide for such an educational need, it remains questionable whether the secondary school system should be restructured to remedy this deficiency or whether the growth of the alternative institutions should be encouraged.

From our analysis of the evidence and examination of other relevant literature, we favour a restructuring of secondary school years 11 and 12 to provide a comprehensive core curriculum along the lines of that suggested by the Curriculum Development Centre in its booklet 'Core Curriculum for Australian Schools', details of which are reproduced at appendix (iii).

We believe that such a core curriculum will have the necessary width and flexibility to provide courses suitable for those who wish to go onto higher academic or trade studies or for those who seek a sound general education at either year 11 or 12 level. We also believe that this degree of flexibility can be achieved without the obvious streaming of students. We would also envisage such a system linking itself with other institutions that provide education in specific skills and work experience programs.

However, such a restructuring also raises the question of whether this should be accomplished within existing secondary schools or whether the restructured non-compulsory years of education be conducted by separate institutions. A recent detailed evaluation of secondary colleges by the researchers, Don Anderson, Marijke Saltet and Aat Yervoorn entitled 'Schools to Grow In', conclude that separate Senior High Schools or Colleges that cater for the years 11 and 12 students provide an environment that is more conducive to student motivation and learning than the corresponding years in a traditional high school.

This research found (as in the case of Oakleigh Technical College and the case of St Joseph's Vocational College which we observed) that senior students are more likely to be motivated and committed to learning when they are in an adult environment where teacher-student relations are less formal, where there is a different motivation to attend

classes or to study and where the subject matter of courses involves technical and vocational skills seen to be relevant and meaningful by the students. In this context, students who would otherwise be lacking in confidence and underachieving become more able to relate personally to the practical curriculum.

We are of the opinion that secondary education should be restructured to cater for the needs and aspirations of all without any particular bias towards white or blue collar careers. We believe that such a restructuring would also engender greater enthusiasm in the teaching staff and the highest motivation in the students. We also suggest that if this new approach to secondary education could be developed on a nationwide basis, it would significantly reduce the number of early school leavers by offering new opportunities to those who are disenchanted with the traditional education fare. This, we believe, also has important implications for reducing the need for school-to-work transition programs.

As the Committee moved around the States in the course of taking public evidence, it became clear that there was much re-thinking taking place in the secondary schools and that much was already being done to offer greater comprehensiveness in secondary school programs. As we have already noted, restructuring of the secondary school system is already taking place in some States and in the A.C.T. Moves towards greater comprehensiveness in Australian secondary schools also seems to have the support of leading educationalists and researchers who have studied the problems in the secondary schools.

However, rather than allow these important changes to come about on an ad hoc basis, we believe that the time has now come for a national assessment of the future role of the Australian secondary school system.

We therefore strongly Recommend:—

1. That the Australian Education Council urgently convene a conference between representatives of Commonwealth and State Education Departments for the purpose of drawing up plans for a restructuring of the secondary school system to provide curriculum structures that directly serve school leavers with non-academic outcomes.
2. That in consideration of such a proposal, particular attention be given to the efficacy of having the non-compulsory years 11 and 12 of secondary education conducted in separate senior high schools or colleges.

Practical Orientation for Educational Research

Apart from the occasional reference by a witness to some educational problem that was thought to warrant research attention, the role of educational research and development did not emerge as a significant issue in the inquiry. This was somewhat surprising considering that a number of the problems that came to the Committee's attention during the inquiry appeared to be of a long standing nature and important enough to attract the attention of researchers. Research into improved teaching techniques is one; there were others such as the vexed question of optimum class and school size; better diagnostic techniques for detecting early learning difficulties in children; the effects of television viewing on the learning behaviour of students and a number of others.

The Committee was disturbed to note that even in cases where valuable and relevant research had been completed, very little of these findings was being translated into improved school practices. There is also evidence that not enough attention is being given to whether or not research projects that are commissioned will, on completion,

have any worthwhile practical application to current problems confronting the education system. The Education Research Development Committee (ERDC) has also gone on public record as stating:

'We were very conscious that a great deal of research which was valuable, which raised important issues, simply was pigeon-holed away in unread reports or put in academic journals where it was read by researchers, but never got to the people whose children were most affected by it.'

The ERDC has also warned that if its \$2 million a year Research budget is to be used to maximum effect, then a great deal more will have to be done about improving dissemination of information about educational issues. It appears that bottlenecks in the dissemination of information, do not allow research findings to filter down the line to the administrators, educators or teachers where it can be put to constructive use at the practical teaching level.

There also seems to be a fundamental conflict of interest between educational policy and the personal views of the researcher. There is evidence that research is not sufficiently geared to current policy requirements and research findings are rarely translated to a form that can be used in practical terms. There should, therefore, be some degree of co-operation between the researcher and the educationalist whose job it is to translate research findings into practical applications. Such co-operation should include the tailoring of research to refine and implement current policy requirements and to produce conclusions and recommendations in a form that have practical application.

This leads us to suggest that there is a need for more effective co-ordination in educational research at both Commonwealth and State levels. This process of research co-ordination should involve not only organisations which fund educational research and educational policy makers but also in an appropriate and accountable way the classroom teacher, parent organisations and teacher training colleges. Through such collaboration it should be possible to maximise the cost effectiveness of educational research by directing it into areas where it is most needed and in a manner that is most likely to give it its greatest practical impact.

The Committee Recommends:—

1. That priorities for educational research be directed towards solving practical problems related to the school, the classroom and teacher training.
2. That whenever possible research findings be translated into statements for policy development and practical propositions so that more effective use can be made of them.
3. That Commonwealth and State Governments ensure more effective co-ordination in educational research so that research programs refine and implement current policy requirements and produce recommendations in a form that have practical applications; and so that the process of co-ordination involves not only researchers and policy makers but also in an appropriate and accountable way the classroom teachers, parent organisations and teacher training colleges.

APPENDIX (I)

List of Witnesses who appeared before the Committee

Ager, Mr Vernon Peter Wycliffe, Executive Chairman, Lower South East Link Course Authority, Mt Gambier, South Australia
Alder, Mr Ian Jackson, General Secretary, A.C.T. Teachers' Federation, Australian Capital Territory
Barnes, Mr Victor Charles Delph, College Counsellor, Marlestone College of Further Education, Marlestone, South Australia
Bechly, Mr Robin Edward, Chairman, Education and Training Committee, Queensland Confederation of Industry, Brisbane, Queensland
Beckmann, Mrs Heather Dawn, Vice-President, Queensland Council of Parents and Citizens Association, Brisbane, Queensland
Belben, Miss Ruth Elizabeth, Project Officer, Community Youth Support Scheme, Maylands, Western Australia
Bingley, Mr Eric Benson, State President, The Western Australian Council of State School Organisations Inc., Perth, Western Australia
Bissett, Mr John Hood, Acting Head, Department of Languages and Literature, Kelvin Grove College of Advanced Education, Kelvin Grove, Queensland
Blissenden, Mr William Edward, Primary Program Co-ordinator, Catholic Teachers College, North Sydney, New South Wales
Boland, Sister Marie Therese, Principal, St Joseph's Vocational College, Port Macquarie, New South Wales
Bond-Hughes, Mrs Pamela Margaret, Vice-President, The Western Australian Council of State School Organisations Inc., Perth, Western Australia
Botsman, Dr Peter Bernard, Director, Kelvin Grove College of Advanced Education, Kelvin Grove, Queensland
Brown, Mr Alan Gordon, Secretary, A.C.T. Council of Parents and Citizens Associations Inc., Downer, Australian Capital Territory
Cairnes, Mr Richard Alexander, Principal, Girrawheen Senior High School, Girrawheen, Western Australia
Cameron, Mr Peter Robert, Acting Assistant Secretary, Schools Commission, Woden, Australian Capital Territory
Campbell, Mr Richard Malcolm, Co-ordinator, Access Skills Project Team, Department of Education, Melbourne, Victoria
Carlson, Mr David Charles, Senior Vice-President, State School Teachers' Union of W.A. (Inc.), Perth, Western Australia
Carr, Mr Adrian Noel, Information/Research Officer, South Australian Institute of Teachers, Parkside, South Australia
Carss, Dr Brian William, Dean of the Faculty of Education, University of Queensland, St Lucia, Queensland
Chalmers, Mr Andrew, Principal Lecturer, Salisbury College of Advanced Education, Salisbury East, South Australia
Clisby, Mr Reginald Victor, Member, Lower South East Link Course Authority, Mount Gambier, South Australia
Coats, Mr James Robert, Member of Council, A.C.T. Teachers' Federation, Australian Capital Territory
Coggins, Mr Robert Symes, Director, Salisbury College of Advanced Education, Salisbury East, South Australia
Connelly, Dr Desmond, Principal, Institute of Early Childhood Development, Kew, Victoria
Cook, Dr Brian Lawrence, Head of Curriculum Studies, School of Teacher Education, Western Australian Institute of Technology, Perth, Western Australia
Cooper, Ms Nance, Research Officer, New South Wales Teachers' Federation, Sydney, New South Wales
Dawson, Mr Allen Oswald Weston, Secretary, Australian Chamber of Commerce, Canberra, Australian Capital Territory

Dean, Mr Roger Levinge, Institute of Public Affairs (NSW), Chairman, Education Committee, Sydney, New South Wales
 Donnelly, Reverend Father Leo Francis, Administrator, St Joseph's Vocational College, Port Macquarie, New South Wales
 Eagleton, Mr Keith John, Principal, Port Macquarie Primary School, Port Macquarie, New South Wales
 Edwards, Mr Robert Lloyd, Principal, Wauchope High School, Wauchope, New South Wales
 Edwards, Mr Ronald George, Councillor, Queensland Division, Institute of Personnel Management Australia, Brisbane, Queensland
 Fell, Mr Kevin, Co-ordinator, Graduate Diploma of Special Education, Institute of Early Childhood Development, Kew, Victoria
 Firkins, Mr Peter Charles, Director, Perth Chamber of Commerce, West Perth, Western Australia
 Fleet, Ms Alma Ann Corry, Lecturer, Nursery School Teachers' College, Newtown, New South Wales
 Forrester, Mr David, Executive Councillor, The Western Australian Council of State School Organisations Inc., Perth, Western Australia
 Gall, Mrs Jan, Member, State Executive, Isolated Children's Parents' Association (Qld Council), Blackall, Queensland
 Gardner, Mr Roy Patrick, Senior Lecturer Mathematics, Mount Lawley Technical College, Perth, Western Australia
 George, Mr Patrick, National Secretary, Technical and Further Education Teachers' Association of Australia, Sydney, New South Wales
 Ghee, Mr Richard, Principal, Marlestone College of Further Education, Marlestone, South Australia
 Giles, Ms Penelope, Union Research Officer, Victorian Teacher's Union, Australian Teacher's Federation, Melbourne, Victoria
 Gillett, Ms Judy Carol, Acting Principal, Reading Development Centre, South Australian Department of Education, Adelaide, South Australia
 Gooley, Ms Anne, National Trainee Teacher Officer, Australian Union of Students, Carlton, Victoria
 Gorrie, Mrs Marion, Vice-President, A.C.T. Council of Parents and Citizens Associations Inc., Downer, Australian Capital Territory
 Grant, Mr John McKenzie, Director of Curriculum, Australian Capital Territory Schools Authority, Canberra, Australian Capital Territory
 Green, Ms Gail Dorothy, Project Officer's Association, Community Youth Support Scheme, Melville, Western Australia
 Greenall, Mr Douglas Stanley, Vice-Principal, Oakleigh Technical School, Oakleigh, Victoria
 Gregory, Mr John Francis, President, South Australian Institute of Teachers, Parkside, South Australia
 Griffiths, Mr Kenneth, Assistant Secretary, Industrial Training Commission of Victoria, Melbourne, Victoria
 Gunn, Mr Raymond Charlton, Principal, Education Programs, Curriculum Branch, Australian Capital Territory Schools Authority, Canberra, Australian Capital Territory
 Haldane, Mr Dale Robert, English Master, Girrawheen Senior High School, Girrawheen, Western Australia
 Hamann, Mr Keith Maurice, Principal Education Officer, South Australian Department of Education, Adelaide, South Australia
 Hamilton, Mr William Henry, President, Wauchope High School Parents and Citizens Association, Wauchope, New South Wales
 Hammerberg, Mr Raymond James, Executive Officer, National Electrical Industry Training Committee, South Melbourne, Victoria
 Hasegawa, Ms Gay, Research Assistant, Department of Education, Melbourne, Victoria
 Hay, Mr Trevor Thomas, Lecturer in Education, Institute of Early Childhood Development, Kew, Victoria
 Hayward, Mr William, President, Association of Independent Schools of Queensland, Milton, Queensland

Henkel, Mr Geoffrey Graeme, President, A.C.T. Council of Parents and Citizens Association Inc., Downer, Australian Capital Territory

Hickey, Miss Clare Patricia, Co-ordinator, Commerce-Service Section, St Joseph's Vocational College, Port Macquarie, New South Wales

Hill, Mr Peter William, Education Officer, Education Department of Western Australia, West Perth, Western Australia

Hobson, Mr Anthony John, Institute of Personnel Management Australia, Brisbane, Queensland

Hodsdon, Ms Lesley, Editor, 'Australian TAFE Teacher', Technical and Further Education Teachers' Association of Australia, Sydney, New South Wales

Hossack, Mr Ian, Secretary, Schools Commission, Woden, Australian Capital Territory

Howard, Mr Arthur Lester, Research Officer, National Employers' Industry Council, Confederation of Australian Industry, Melbourne, Victoria

Howell, Mr Maxwell, Committee Member, Association of Independent Schools of Queensland, Milton, Queensland

Hughes, Mr Phillip, Head of School, School of Education, Canberra College of Advanced Education, Belconnen, Australian Capital Territory

Irons, Dr Calvin James, Senior Lecturer in Mathematics, Kelvin Grove College of Advanced Education, Kelvin Grove, Queensland

Jones, Dr Graham Alfred, Head, Division of Science, Kelvin Grove College of Advanced Education, Kelvin Grove, Queensland

Kemp, Mr Bruce Reginald, Chief Curriculum Division, N.S.W. Department of Education, Sydney, New South Wales

Knight, Mr Mervyn Walter, Assistant General Secretary (Education), State School Teachers' Union of Western Australia (Inc.), Perth, Western Australia

Lake, Dr John Heath, Head of Teaching Studies, School of Teacher Education, Western Australian Institute of Technology, Perth, Western Australia

Lancaster, Mr Richard Barry, Member, Queensland Division, Institute of Personnel Management Australia, Brisbane, Queensland

Leckie, Ms Jane, Senior Teacher, Humanities, Oakleigh Technical School, Oakleigh, Victoria

Little, Mr Graham, Principal Lecturer Curriculum Studies, Canberra College of Advanced Education, Belconnen, Australian Capital Territory

Lloyd, Mr Arthur John, Education Liaison Officer, Australian Council of Trade Unions, Melbourne, Victoria

Lloyd, Mr Trevor Kenneth, General Secretary, State School Teachers' Union of Western Australia (Inc.), Perth, Western Australia

Maddocks, Dr George Raymond, Assistant Director-General, Department of Education, Melbourne, Victoria

Manefield, Mr Barry, President, N.S.W. Teachers' Federation, Sydney, New South Wales

Marginson, Mr Simon William, Education Research Officer, Australian Union of Students, Carlton, Victoria

Marsland, Mr Anthony John, Principal, Capalaba State High School, Capalaba, Queensland

Martin, Mrs Lilian, Lecturer, Nursery School Teachers' College, Newtown, New South Wales

Martin, Mr Victor Francis, Community Youth Support Scheme, Maylands, Western Australia

Maxwell, Mr Donald, Executive Director, Port Macquarie-Hastings Tourist Authority, Port Macquarie, New South Wales

Maxwell, Mr Reginald Grant, Vice-Chairman, Personnel Services Association of Queensland, Brisbane, Queensland

McClintock, Ms Joan, Deputy Secretary-General, Australian Council of Social Service, Sydney, New South Wales

McGarvie, Mr Graham Alan, President, Victorian Institute of Inspectors of Schools, Glen Waverley, Victoria

McGrath, Mr William Clement, Principal, Catholic Teachers College, North Sydney, New South Wales

McKinnon, Dr Kenneth Richard, Chairman, Schools Commission, Woden, Australian Capital Territory

Meldrum, Mr Ivan Ray, President, Port Macquarie High School Parents and Citizens Association, Port Macquarie, New South Wales

Menz, Mr William John, Member, Executive Committee, South Australian Chamber of Commerce and Industry, Adelaide, South Australia
 Miles, Mr Patrick Joseph, Chairman, National Electrical Industry Training Committee, South Melbourne, Victoria
 Milne, Mr Gordon Keith, Principal, Port Macquarie High School, Port Macquarie, New South Wales
 Mitchell, Mr Robert Leonard, State Co-ordinator of the EPUY, Strathfield Technical College, Sydney, New South Wales
 Moore, Dr William Edwin, Chief of Division of Educational Research, N.S.W. Department of Education, Sydney, New South Wales
 Moxham, Mr Thomas Eric, Senior Counsellor, Technical Education Division, Perth, Western Australia
 Murphy, Mr Robin Wayne, Mini-School Co-ordinator and Teacher, Oakleigh Technical School, Oakleigh, Victoria
 Murphy, Mr Terence George, Office Manager-Paymaster, Hastings Co-operative Limited, Wauchope, New South Wales
 Murray, Mr John David, Head of Language and Literature, Catholic Teachers College, North Sydney, New South Wales
 Napthali, Dr Warick Arthur, Senior Lecturer, Head of Mathematics Department, Goulburn College of Advanced Education, Goulburn, New South Wales
 Nebauer, Mr John, Inspector of Schools, Department of Education, Sydney, New South Wales
 Negro, Mr Olaf, Senior Lecturer, English General Studies, Mount Lawley Technical College, Perth, Western Australia
 Negus, Mr John, President, State School Teachers' Union of Western Australia (Inc.), Perth, Western Australia
 Noakes, Mr Bryan Maxwell, Director, National Employers' Industrial Council, Confederation of Australian Industry, Melbourne, Victoria
 O'Brien, Mr Maurice Aloysius, Director of Curriculum, South Australian Department of Education, Adelaide, South Australia
 O'Neill, Mrs Judith, Social Welfare Research Officer, Australian Council of Trade Unions, Melbourne, Victoria
 Paul, Dr Dale Carl, Assistant Director (Academic), Salisbury College of Advanced Education, Salisbury East, South Australia
 Peate, Mr Ivan Glennister, Superintendent of Education (Technical), Education Department of Western Australia, West Perth, Western Australia
 Penhallurick, Mr John Murray, Lecturer in English, Canberra College of Advanced Education, Belconnen, Australian Capital Territory
 Prowse, Mr Brian, Committee Member, Lower South East Link Course Authority, Mount Gambier, South Australia
 Quinn, Mr Thomas Francis, Deputy Principal, St Joseph's Vocational College, Port Macquarie, New South Wales
 Rafferty, Mr Rowan Grant, Executive Member, A.C.T. Council of Parents and Citizens Association Inc., Downer, Australian Capital Territory
 Ramshaw, Mr Eric, Deputy Principal, Girrawheen Senior High School, Girrawheen, Western Australia
 Ransley, Mr Wayne Kenneth, Lecturer in Education, Canberra College of Advanced Education, Belconnen, Australian Capital Territory
 Rickard, Mr Alexander Gordon, District Inspector of Schools, Department of Education, Melbourne, Victoria
 Rodger, Mr Henry, Vice-President, Association of Independent Schools of Queensland, Milton, Queensland
 Rootsey, Mr Lester, Executive Member, Australian Teachers' Federation, Melbourne, Victoria
 Russell, Mr Henry James, Assistant Director, Commonwealth Department of Education, Sydney, New South Wales
 Sawatzki, Mr Maxwell John, Principal, Springwood State High School, Springwood, Queensland
 Schmid, Mrs Valery, Acting Head of Mathematics and Science, Catholic Teachers College, North Sydney, New South Wales

Seymour, Reverend Samuel M., President, Association of Heads of Independent Girls' Schools of Queensland, Brisbane, Queensland

Simpson, Mr Gordon Alec, Executive Director, Institute of Public Affairs (NSW), Sydney, New South Wales

Smith, Miss Philippa Judith, Policy Officer, Australian Council of Social Service, Sydney, New South Wales

Stoodley, Mr James Theodore, Principal, Mount Gravatt State High School, Mount Gravatt, Queensland

Sweeney, Miss Patrica, Infants' Program Co-ordinator, Catholic Teachers College, North Sydney, New South Wales

Sweet, Mr Richard, Member, Technical and Further Education Teacher's Association of Australia, Sydney, New South Wales

Thomas, Mr Jack Digney, Principal, Oakleigh Technical School, Oakleigh, Victoria

Thomas, Mr Rodger William Scott, Secretary, Lower South East Link Course Authority, Mount Gambier, South Australia

Turner, Mr John Reginald, President, Port Macquarie Primary School Parents and Citizens Association, Port Macquarie, New South Wales

Vacchini, Mr Ian, Staff Inspector, Policy Support Unit, N.S.W. Department of Education, Sydney, New South Wales

Vickery, Dr Robert L., Deputy Director General (Education), Education Department of Western Australia, West Perth, Western Australia

Vivian, Mr Ivor Francis, Principal Lecturer in Mathematics, Canberra College of Advanced Education, Belconnen, Australian Capital Territory

Warner, Mr James Stephen, President, Isolated Children's Parents' Association (Qld Council), Talwood, Queensland

Whitelegg, Mr James William, Head Department of Engineering, Mount Lawley Technical College, Perth, Western Australia

Whittome, Mr Victor Edgar, Senior Project Officer, YMCA of Perth Community Youth Support Scheme, Perth, Western Australia

Wills, Mr David Linney, National Vice-President and Chairman, National Education and Training Committee, Metal Trades Industry Association of Australia, North Sydney, New South Wales

Winnett, Mr George Norman, Superintendent of Secondary Education, Education Department of W.A., Perth, Western Australia

Wittwer, Mr Randell Leigh, Teacher, Bankstown Technical College, Bankstown, New South Wales

Wolfenden, Mr Brian Victor, Senior Master of English, Girrawheen Senior High School, Girrawheen, Western Australia

Wolfgang, Mrs Juliet, Council Member, Institute of Public Affairs (NSW), Sydney, New South Wales

Wright, Mr Douglas Thomas, Director, N.S.W. Branch, Metal Trades Industry Association of Australia, North Sydney, New South Wales

Wyatt, Mr Peter John, Reading Advisory Teacher, Reading Development Centre, South Australian Department of Education, Adelaide, South Australia

Yarrow, Mr William Henry Thoburn, President, Queensland Council of Parents and Citizens Association, Brisbane, Queensland

Young, Mr Donald Clem, Acting Head, Division of Humanities, Kelvin Grove College of Advanced Education, Kelvin Grove, Queensland

APPENDIX (ii)

List of People and Organisations who Provided the Committee with Submissions and Other Written Material

Ahern, Mr M. J., M.P., Queensland Parliamentary Select Committee on Education
Arlow, Mr M. J., O'Halloran Hill College of Further Education, Brighton, S.A.
A.C.T. Chamber of Commerce
A.C.T. House of Assembly
A.C.T. Schools Authority
A.C.T. Teachers Federation, Weston Creek, A.C.T.
Australian Chamber of Commerce
Australian Council for Educational Research Ltd
Australian Council of State Schools Organisations
Australian Federation of Business and Professional Women's Clubs
Backhouse, Miss E. M., Tasmanian Teachers Federation, Hobart, Tas.
Bail, Mr R., State College of Victoria at Hawthorn, Hawthorn, Vic.
Balaam, Mr L. N., The University of Sydney, N.S.W.
Banks, Mrs A., Isolated Children's Parents Association, Blackall, Qld
Barnes, Mr V. C., Marleston College of Further Education, Marleston, S.A.
Barrett, Mr K. J., Kimberley Regional Community Education Centre, Derby, W.A.
Barrie, Mr J., Northern Rivers College of Advanced Education, Lismore, N.S.W.
Bassett, Mr W. G., The Institution of Engineers, Australia, Barton, A.C.T.
Beckmann, Ms H., Qld Council of Parents' and Citizens' Association, Brisbane, Qld.
Blissenden, Mr W., Catholic Teachers College Sydney, North Sydney, N.S.W.
Bodinnar, Mrs B., Albury, N.S.W.
Bond, Mr A., Tasmanian Technical Colleges Staff Society, Hobart, Tas.
Booth, Ms A., Moe, Vic.
Brennan, Mr M., Riverina College of Advanced Education, Wagga Wagga, N.S.W.
Brighton Technical School, North Brighton, Vic.
Brown, Mrs C. J., Rockingham, W.A.
Byron, Mr H. R., Central Office, Department of Housing and Construction, Dickson, A.C.T.
Brudenall, Mr J., The Library Association of Australia, Sydney, N.S.W.
Burford, Mr M., Australian Union of Students, Carlton, Vic.
Campbell, Professor W. J., Department of Education, University of Queensland, St Lucia, Qld.
Campbell, Mrs C. E., Wahroonga, N.S.W.
Carr, Ms J., c/- Community Education Centre, Geraldton, W.A.
Carss, Dr W., University of Queensland, St Lucia, Qld.
Charlton, Mr W., Victorian High Schools Principles Association, Blackburn, Vic.
Chester, Lyn, A.C.T. Schools Authority
Chopra, Mr P., University of Newcastle, Newcastle, N.S.W.
Clark, Rev. D. B., c/- The Hutchins Schools, Sandy Bay, Tas.
Cleland, Mrs R., Greenvale, Vic.
Clercq, Mrs D. Le, Montessori Association of Brisbane, Brisbane, Qld.
Clothier, Mr A. H.
Coates, Mr J., c/- Copland College, Melba, A.C.T.
Coleman, Mr E., Adelaide College of the Arts and Education, Adelaide, S.A.
Collins, Mr J. M., Mount Lawley College of Advanced Education, Mount Lawley, W.A.
Commonwealth Department of Defence, A.C.T.
Commonwealth Department of Education, A.C.T.
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APPENDIX (III)

Core Curriculum for Australian Schools

Areas of Knowledge and Experience

1. ARTS AND CRAFTS

Arts and crafts cover a wide and diverse area including literature, music, visual arts, drama, wood, metal and plastic crafts, and many others. Whilst in some respect it is not satisfactory to group these together, in the school setting they have many features in common, especially in regard to the techniques and tools used and in the approaches adopted towards the shaping and manipulation of materials. The neglect of particular art forms, divided opinions about the need for general aesthetic education as distinct from expression through the arts, and the uneven approach to basic craft teaching in many schools, suggest the need for a comprehensive review of these areas of the curriculum. We have yet to define essential elements of experience, understanding, appreciation and skill, and to select a manageable array of learnings for schools. Until this is done and strong rationales produced, there will be a tendency on the one hand to multiply options and on the other to treat the arts as dispensable in schooling when other pressures obtrude. In fact, they represent major, fundamental forms of human expression, understanding, appreciation and communication. Given the range and diversity of arts and crafts, further studies are needed on the selection, organisation and direction of a sequential core program through all the years of schooling.

2. ENVIRONMENTAL STUDIES

The central purpose of environmental studies within the core is awareness and understanding of both the physical and man-made environments and sensitivity to the forces that sustain or may destroy them. This requires both systematic knowledge drawn from such disciplines as biology, geography, landscape architecture, economics, etc., and a readiness by schools to participate in environmental maintenance projects which given students practical experience in the field. As in other areas of the core, there is an emphasis on social action—environmental studies represents a blend of theory and practice which may be organised in many different ways. Within the core, what is important is not the particular kind of organisation, but the environmentalist approach or perspective. This is an amalgam of types of knowledge and understanding, and a disposition to sustain and protect the environment.

3. MATHEMATICAL SKILLS AND REASONING AND THEIR APPLICATIONS

In addition to an understanding of basic number processes and their application in individual and social life, the main role of mathematics within the core is as a form of symbolising and quantifying. Mathematics contributes a view of the world, not merely practical skills, and this view needs to be fostered through problem-solving approaches, a wide range of applications and the training of reasoning. Applied mathematics relates to several other subject areas, for example, sciences, social sciences and some aspects of craft and technology. The relevance of mathematics to contemporary life has become increasingly apparent through calculators, computers and other technical applications, of which students need at least a general understanding.

4. SOCIAL, CULTURAL AND CIVIC STUDIES

The focus of social, cultural and civic studies is the understanding of what is required for effective participation in social life, including the major political, social and cultural institutions and processes of Australia as a democratic and economically advanced society. These studies include consideration of the place and significance of belief and value systems (religion, ideology) in our society. They have dimensions which are both historical (social/political/economic history) and contemporary (social issues and trends, the law, consumerism, social values, etc.). They may be taught separately as 'social sciences' (including history, economics, etc.) and 'cultural studies' (including religion and values education), or in an integrated fashion. The scope of these studies should include the diverse sub-cultures and common cultures within Australia (including ethnic and Aboriginal sub-cultures), and in other societies, and the ideas of an international or world order. Opportunity should be provided for students to appraise and assess the evolution, present

status of and trends in the social and civic order and to undertake practical action projects. As prospective citizens, students have a part to play in deciding the future of their country and of the international order. For these studies to have practical relevance they must relate to the present life experiences and interests of the students.

5. HEALTH EDUCATION

Growing public concern over health standards of Australians, reflecting the economic and psychic costs of ill-health, and the introduction of extensive and costly community health programs, suggest a need for sustained effort in school education. Health education has an immediate value to and impact on students which are available to few other areas of the curriculum.

The core curriculum needs to give scope to physical, emotional mental and community health studies, and to provide opportunity for practical applications. 'Health', in becoming a school subject, may run the risk of being perceived as yet another body of knowledge to be known about rather than directly experienced.

The health area needs to be approached through a wide range of studies ranging from the sciences of human biology and nutrition to programs of sport and physical recreation, general health care and relaxation. As with arts and crafts, there is need for an overall review of the area, to produce a well-organised practical frame-work for teaching and to gain acceptance of the need for all students to become involved in self-help health education programs.

6. SCIENTIFIC AND TECHNOLOGICAL WAYS OF KNOWING AND THEIR SOCIAL APPLICATIONS

Science and technology are fundamental forms of human thought and powerful applications of organised problem-solving to practical situations in the everyday life of individuals, for whole societies and for the world order. They exemplify not only rational but also intuitive, imaginative and creative powers of the highest order. They are decisive forces in the transformation of social and economic life, belief systems and working life. Their study in the core requires an emphasis on forms of knowledge, synthesis, interpretation and extrapolation of data, problem-solving, decision-making, theory-practice relations and social action. They are a means of interpreting and modifying the environment. Thus, scientific and technological studies need to pay attention to social issues, inter-relationships amongst science, technology and social trends and needs, and the historical conditions giving rise to scientific and technical change. Although choice of material for learning may vary widely, science and technology in the core should provide opportunity for a common set of skills, understandings and dispositions—scientific and technical thinking and their applications.

7. COMMUNICATION

Communication includes both verbal and non-verbal modes and relates equally to knowledge and feeling—and these frequently interact, as for example in face-to-face conversation. We must select for the core, those which are basic and essential. Language studies are an indispensable tool in many areas of learning and are intimately related to student thinking and expression. They include listening, speaking, reading and writing, which should be kept in balance throughout the school years. Non-verbal communication is equally a fundamental part of social life. Visual learning directs students towards an understanding and appraisal of the mass-media and visual competence is necessary in many school subjects. Body communication, apart from its significance in everyday life, has a central place in several of the arts. Should the core include languages other than English?

Despite the persuasive arguments advanced from foreign and 'ethnic' languages, it would be difficult at present to justify these as part of a practical core for all students. What is indisputable essential is that all Australians should become competent users of the English language. How are the core should and could extend to include any language other than English is a question over which educators are divided and the Centre would wish to have more discussion—and evidence—on this point.

8. MORAL REASONING AND ACTION, VALUE AND BELIEF SYSTEMS

The development of morality and the capacity to discriminate amongst values and beliefs is both a crucial part of the overall development of the rounded person and a civic necessity. Trans-

formation of moral action from the level of habitual and routine behaviour in childhood to a mature stage of critical analysis and reflective action requires a systematic, continuing approach throughout the years of schooling. Values education relates to many aspects of life in addition to moral behaviour, but has close affinities with it. Whilst the teaching of morality and values, as such, readily lends itself to abuse through indoctrination, its neglect in the curriculum may be regarded as a serious deficiency in many schools. The teaching of morality and values need, and perhaps ought, not depend on a separate course, but may be incorporated in other areas—for example social, cultural and civic studies or the arts—and within established subjects and in a wide range of school relationships between students and teachers. Whilst the teaching of religious belief and practice cannot claim a place in a core, teaching about religion may be regarded as essential for all students in developing their understanding of the world in which they live.

9. WORK, LEISURE AND LIFESTYLE

The notion of educating for present and future life is of central importance in schooling. Whilst all other core areas should contribute to this, there remain a number of aspects of universal human experience which may not be touched upon at all unless some additional, umbrella-like area is included in the core curriculum. There is much debate about the extent to which schools are distinct from other social agencies or indeed individuals themselves should shoulder responsibility for 'education for life'. The case is complex, and cannot be argued here. The Centre accepts that for many different reasons schools ought to incorporate into the core curriculum a progressive introduction to the working environment, to developing and changing human relationships, to leisure-time interests and pursuits, and to such universal requirements of our culture as the ability to drive a car, plan a budget, keep records, purchase goods wisely, and organise a household.

Entire curricula have been built around such a 'life preparation' notion but the weakness of this approach has been shown to be a neglect of the fundamental forms of human knowledge and experience, and of the skills required to participate in them. It seems preferable, therefore, to build a life preparation element into the core, to plan it around a selection of requirements of everyday life, and teach it at the levels of knowledge, understanding and reflective practice rather than low-level skills and techniques.